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SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Daniel Davis Examiner #: 79061 Date: 8/15/04
Art Unit: 3731 Phone Number 305-1232 Serial Number: 09/872,526
Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: _____

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Date Completed:	Litigation		Lexis/Nexis	
Searcher Prep & Review Time:	Fulltext		Sequence Systems	
Clerical Prep Time:	Patent Family		WWW/Internet	
Online Time:	Other		Other (specify)	

PTO-1590 (8-01)

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FILE 'HOME' ENTERED AT 15:34:54 ON 20 JUL 2004

=> file medline
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
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FULL ESTIMATED COST                                     0.21       0.21

FILE 'MEDLINE' ENTERED AT 15:35:04 ON 20 JUL 2004

 FILE LAST UPDATED: 17 JUL 2004 (20040717/UP).  FILE COVERS 1951 TO DATE.

 On February 29, 2004, the 2004 MeSH terms were loaded.  See HELP RLOAD
 for details. OLDMEDLINE now back to 1951.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2004 vocabulary.  See http://www.nlm.nih.gov/mesh/ and
 http://www.nlm.nih.gov/pubs/techbull/nd03/nd03_mesh.html for a
 description of changes.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.
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```
=> s fetal tissue
        215418 FETAL
             6 FETALS
        215420 FETAL
                  (FETAL OR FETALS)
        771399 TISSUE
        241182 TISSUES
        916794 TISSUE
                  (TISSUE OR TISSUES)
L1        6659 FETAL TISSUE
                  (FETAL(W)TISSUE)

=> s in utero or donor
         15160 UTERO
             1 UTEROS
         15160 IN UTERO
                  (UTERO OR UTEROS)
         75880 DONOR
         77222 DONORS
        131598 DONOR
                  (DONOR OR DONORS)
L2      146532 IN UTERO OR DONOR

=> s percutan?
L3       59250 PERCUTAN?

=> s l1 (S) l2 (S) 3
       2640231 3
L4           2 L1 (S) L2 (S) 3

=> d 1-2 ibib abs

L4   ANSWER 1 OF 2     MEDLINE on STN
ACCESSION NUMBER:   2002728303     MEDLINE
DOCUMENT NUMBER:    PubMed ID: 12489998
TITLE:              A preliminary evaluation of recombinant adeno-associated
                    virus biodistribution in rhesus monkeys after intrahepatic
                    inoculation in utero.
AUTHOR:             Lai Lihui; Davison Billie B; Veazey Ronald S; Fisher
                    Krishna J; Baskin Gary B
CORPORATE SOURCE:   Division of Comparative Pathology, Tulane National Primate
                    Research Center, 18703 Three Rivers road, Covington, LA
                    70433, USA.
CONTRACT NUMBER:    RR 00164 (NCRR)
SOURCE:             Human gene therapy, (2002 Nov 20) 13 (17) 2027-39.
                    Journal code: 9008950. ISSN: 1043-0342.
PUB. COUNTRY:       United States
DOCUMENT TYPE:      (EVALUATION STUDIES)
                    Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
ENTRY MONTH:        200308
ENTRY DATE:         Entered STN: 20021220
                    Last Updated on STN: 20030805
                    Entered Medline: 20030804
AB   The ability to deliver genes to fetuses in utero may prove crucial for
     those genetic diseases that are associated with severe fetal morbidity and
     for which there is no effective postnatal therapy. In utero therapy may
     be especially useful in diseases that affect the central nervous system
     because the immature blood-brain barrier may facilitate gene delivery to
     neural target cells. We investigated whether in utero inoculation of
     recombinant adeno-associated virus (rAAV) into rhesus monkey fetuses would
     be a useful method of gene delivery, especially to the central nervous
     system. When the monkeys were sacrificed after birth, we found vector
     genomes distributed in many tissues, including the brain and peripheral
     blood. Pericapillary astrocytes expressing transgene products were
     detected by immunohistochemistry. In addition, we occasionally found
     vector genomes in the maternal blood. No adverse clinical or pathologic
     effects were observed in the inoculated monkeys. We concluded that (1) in
     utero intrahepatic inoculation of rAAV is a potentially safe and
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useful method of delivering genes to many **fetal tissues** ; (2) astrocytes may be the cell type most easily targeted in the central nervous system (CNS) after systemic administration; and (3) the potential of inadvertent gene transfer to the mother must be considered.

L4 ANSWER 2 OF 2 MEDLINE on STN
ACCESSION NUMBER: 90066183 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2586398
TITLE: Neural fetal tissue transplantation. Should we do what we can do?.
AUTHOR: Mahowald M B
CORPORATE SOURCE: Case Western Reserve University School of Medicine, Cleveland, Ohio.
SOURCE: Neurologic clinics, (1989 Nov) 7 (4) 745-57.
Journal code: 8219232. ISSN: 0733-8619.
Report No.: KIE-35138.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Bioethics; Priority Journals
ENTRY MONTH: 199001
ENTRY DATE: Entered STN: 19900328
Last Updated on STN: 20030318
Entered Medline: 19900104

AB The following factors are relevant to ethical considerations regarding fetal tissue transplantation for treatment of neurological disorders: the empirical status of human fetuses or abortuses, different purposes and sites of tissue retrieval or implantation, the therapeutic potential of the technique, the means through which tissue becomes available, possible motives, and possible donors and recipients of transplant tissue. After examining each of these, the author concludes that (1) only dead fetuses should be used as tissue sources, (2) decisions regarding abortion and transplantation should be kept separate, (3) anonymity between **donor** and recipient should be observed, and (4) buying and selling of **fetal tissue** should not be permitted.

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=> d his

     (FILE 'HOME' ENTERED AT 15:34:54 ON 20 JUL 2004)

     FILE 'MEDLINE' ENTERED AT 15:35:04 ON 20 JUL 2004
L1          6659 S FETAL TISSUE
L2        146532 S IN UTERO OR DONOR
L3         59250 S PERCUTAN?
L4             2 S L1 (S) L2 (S) 3

=> s l1 (S) l2 (S) l3
L5             0 L1 (S) L2 (S) L3

=> s l1 (S) l2
L6            60 L1 (S) L2

=> s incision
          19657 INCISION
           5641 INCISIONS
L7        23472 INCISION
                (INCISION OR INCISIONS)

=> s l1 (S) l2  (S) l7
L8             0 L1 (S) L2 (S) L7

=> s transplant?
L9        354581 TRANSPLANT?

=> s l1 (S) l2  (S) l9
L10           14 L1 (S) L2 (S) L9

=> d 1-14 ibib abs

L10  ANSWER 1 OF 14     MEDLINE on STN
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ACCESSION NUMBER: 2004353039 IN-PROCESS
DOCUMENT NUMBER: PubMed ID: 15256967
TITLE: **Fetal tissue** banking for **transplantation**: characteristics of the **donor** population and considerations for **donor** and tissue screening.
AUTHOR: Newman-Gage H; Bravo D; Holmberg L; Mason J; Eisenhower M; Nekhani N; Fantel A
CORPORATE SOURCE: Northwest Tissue Center/Puget Sound Blood Center, Seattle, WA, USA; 921 Terry Avenue, Seattle, WA 98104, USA (Phone/Fax: (206) 292-2317 (206) 343-1776).
SOURCE: Cell Tissue Bank, (2000) 1 (1) 45-53.
Journal code: 100965121. ISSN: 1389-9333.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20040717
Last Updated on STN: 20040717

AB We initiated this study to evaluate the suitability for therapeutic use in transplantation of tissues obtained from human abortuses. We have developed protocols for the collection, handling and preservation of hepatic stem cells from electively aborted embryos and have developed methods for assessment of the cells so derived and processed. In this paper we present our findings regarding screening of potential donors, acquisition of fetal tissues, and assessment of the tissues for potentially infectious contaminants. We assess the suitability of the tissue donors according to current standards used for donors of commonly transplanted tissues (e.g., bone grafts, skin grafts and heart valves) and present data regarding the real availability of tissues from elective abortion procedures that would meet those standard tissue banking criteria.We specifically evaluated the donor's willingness to provide a blood sample for testing, conducted a detailed interview similar to those used for typical organ and tissue donors, and assessed the type and incidence of contamination in collected tissues. We find that although many women are willing to consent to use of the tissues for transplantation, attrition from the study for various reasons results in few fetal organs ultimately realistically available for transplantation. Typical reasons for attrition include: unwillingness to have a blood sample drawn or tested, positive serology results, social/medical high risk factors for acquisition of transmissible disease, no identifiable organs available, and unacceptable microbial contamination. Thus, although it might seem that due to the numbers of abortions performed annually, that there would be substantial numbers of suitable tissues available, only a small proportion are truly suitable for transplantation.

L10 ANSWER 2 OF 14 MEDLINE on STN
ACCESSION NUMBER: 1999439259 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10511241
TITLE: Isolation and intracerebral grafting of nontransformed multipotential embryonic human CNS stem cells.
AUTHOR: Vescovi A L; Gritti A; Galli R; Parati E A
CORPORATE SOURCE: National Neurological Institute C. Besta, Milan, Italy.. vescovi@tin.it
SOURCE: Journal of neurotrauma, (1999 Aug) 16 (8) 689-93.
Journal code: 8811626. ISSN: 0897-7151.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199911
ENTRY DATE: Entered STN: 20000111
Last Updated on STN: 20000111
Entered Medline: 19991124

AB In this work, we show that the embryonic human brain contains multipotent central nervous system (CNS) stem cells, which may provide a continuous, standardized source of human neurons that could virtually eliminate the use of primary human fetal brain tissue for intracerebral transplantation. Multipotential stem cells can be isolated from the developing human CNS in a reproducible fashion and can be exponentially expanded for longer than 2 years. This allows for the establishment of continuous, nontransformed

neural cell lines, which can be frozen and banked. By clonal analysis, reverse transcription polymerase chain reaction, and electrophysiological assay, we found that over such long-term culturing these cells retain both multipotentiality and an unchanged capacity for the generation of neuronal cells, and that they can be induced to differentiate into catechlaminergic neurons. Finally, when transplanted into the brain of adult rodents immunosuppressed by cyclosporin A, human CNS stem cells migrate away from the site of injection and differentiate into neurons and astrocytes. No tumor formation was ever observed. Aside from depending on scarce human neural **fetal tissue**, the use of human embryonic CNS stem cells for clinical neural **transplantation** should provide a reliable solution to some of the major problems that pertain to this field, and should allow determination of the safety characteristics of the **donor** cells in terms of tumorigenicity, viability, sterility, and antigenic compatibility far in advance of the scheduled day of surgery.

L10 ANSWER 3 OF 14 MEDLINE on STN
ACCESSION NUMBER: 1998231886 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9572176
TITLE: Fetal tissue typing in anticipation of neonatal heart transplantation.
AUTHOR: Gilles J M; Burkett G; Perryman R A; Ferrer P L
CORPORATE SOURCE: Department of Obstetrics and Gynecology, University of Miami School of Medicine, Florida 33101-6960, USA.
SOURCE: Obstetrics and gynecology, (1998 May) 91 (5 Pt 2) 823-5. Journal code: 0401101. ISSN: 0029-7844.
PUB. COUNTRY: United States
DOCUMENT TYPE: (CASE REPORTS) Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199805
ENTRY DATE: Entered STN: 19980520 Last Updated on STN: 19980520 Entered Medline: 19980514

AB BACKGROUND: Hypoplastic left heart syndrome is among the most common major congenital cardiac anomalies. Fetuses with this anomaly survive but require either reconstructive surgery or heart transplantation postnatally. CASE: A woman whose fetus was diagnosed with hypoplastic left heart syndrome underwent funipuncture for fetal tissue typing. The fetus then was listed for heart transplantation. Once an ABO-compatible donor heart was procured, the fetus was delivered and immediately underwent transplantation. CONCLUSION: In candidates for neonatal heart **transplantation**, **fetal tissue** typing allows the search for an ABO-compatible **donor** heart to begin earlier. This approach minimizes the morbidity associated with postnatal waiting and allows transplantation to take place while the neonate is less immunocompetent.

L10 ANSWER 4 OF 14 MEDLINE on STN
ACCESSION NUMBER: 97387601 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9243621
TITLE: Medial fetal ventral mesencephalon: a preferred source for dopamine neuron grafts.
AUTHOR: Costantini L C; Lin L; Isacson O
CORPORATE SOURCE: Neuroregeneration Laboratory, Harvard Medical School, McLean Hospital, Belmont, MA 02178, USA.
SOURCE: Neuroreport, (1997 Jul 7) 8 (9-10) 2253-7. Journal code: 9100935. ISSN: 0959-4965.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199710
ENTRY DATE: Entered STN: 19971021 Last Updated on STN: 19990129 Entered Medline: 19971007

AB Currently, **fetal tissue transplantation** into patients with Parkinson's disease utilizes the entire ventral mesencephalon (VM) as **donor** tissue. However, the resulting mixture of cell types contains a relatively low proportion of

therapeutically relevant dopamine (DA) neurons. We show that differential dissection of a medial region of embryonic day 14 rat VM yields a significantly higher proportion of DA neurons (8-10%) than is found in lateral VM (2%) or whole VM (4-5%). Medial VM also contained a larger number of the specific subpopulation of DA neurons (aldehyde dehydrogenase-positive; AHD) that project to dorsolateral motor region of the striatum. Selective dissection of fetal medial VM selectively enriches DA neurons in cell preparations useful for transplantation in Parkinson's disease.

L10 ANSWER 5 OF 14 MEDLINE on STN
ACCESSION NUMBER: 97208925 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9055867
TITLE: Histological evidence of fetal pig neural cell survival after transplantation into a patient with Parkinson's disease.
AUTHOR: Deacon T; Schumacher J; Dinsmore J; Thomas C; Palmer P; Kott S; Edge A; Penney D; Kassissieh S; Dempsey P; Isacson O
CORPORATE SOURCE: Neuroregeneration Laboratory, Harvard Medical School, McLean Hospital MRC 119, Belmont, Massachusetts 02178, USA.
SOURCE: Nature medicine, (1997 Mar) 3 (3) 350-3.
Journal code: 9502015. ISSN: 1078-8956.
PUB. COUNTRY: United States
DOCUMENT TYPE: (CASE REPORTS)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199704
ENTRY DATE: Entered STN: 19970414
Last Updated on STN: 19970414
Entered Medline: 19970401

AB The movement disorder in Parkinson's disease results from the selective degeneration of a small group of dopaminergic neurons in the substantia nigra pars compacta region of the brain. A number of exploratory studies using human **fetal tissue** allografts have suggested that **transplantation** of dopaminergic neurons may become an effective treatment for patients with Parkinson's disease and the difficulty in obtaining human **fetal tissue** has generated interest in finding corresponding non-human **donor** cells. Here we report a post-mortem histological analysis of fetal pig neural cells that were placed unilaterally into the caudate-putamen brain region of a patient suffering from Parkinson's disease. Long-term (over seven months) graft survival was found and the presence of pig dopaminergic neurons and other pig neural and glial cells is documented. Pig neurons extended axons from the graft sites into the host brain. Furthermore, other graft derived cells were observed several millimeters from the implantation sites. Markers for human microglia and T-cells showed only low reactivity in direct proximity to the grafts. This is the first documentation of neural xenograft survival in the human brain and of appropriate growth of non-human dopaminergic neurons for a potential therapeutic response in Parkinson's disease.

L10 ANSWER 6 OF 14 MEDLINE on STN
ACCESSION NUMBER: 96393740 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8800513
TITLE: A mathematical model for the estimation of human embryonic and fetal age.
AUTHOR: Evtouchenko L; Studer L; Spenger C; Dreher E; Seiler R W
CORPORATE SOURCE: Department of Neurosurgery, University of Bern, Inselspital, Switzerland.
SOURCE: Cell transplantation, (1996 Jul-Aug) 5 (4) 453-64.
Journal code: 9208854. ISSN: 0963-6897.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199702
ENTRY DATE: Entered STN: 19970305
Last Updated on STN: 19970305
Entered Medline: 19970220

AB Precise determination of **donor** age in human embryonic and **fetal tissue** is crucial for cell **transplantation** due to the existence of distinct time windows within which successful grafting is possible. This study demonstrates that between 4-12 wk postconception embryonic and fetal age can be estimated based on various morphometric parameters measured on a routine basis in suction abortion material. The greatest length, the neck-rump length, the foot length, and the proximal and distal arm and leg length were correlated with the anamnestic and ultrasonographically estimated age. Multivariate regression analyses showed a linear correlation between age and the logarithmic value of the various morphometric parameters. The best correlation was found for a mathematical model combining the limb parameters ($r = 0.904$; $p < 0.001$; $n = 37$). A prospective follow-up study ($n = 40$) was carried out to test the validity of the mathematical model. A high correlation was found between the calculated age and the estimated age based on anamnestic data ($r = 0.749$, $p < 0.001$). Outliers due to errors in the anamnestic data were readily identified by comparing anamnestic with calculated age. This method allows determination of embryonic and fetal age within and beyond the age group of the Carnegie classification and may, therefore, be useful for the needs of experimental and clinical cell transplantation.

L10 ANSWER 7 OF 14 MEDLINE on STN
ACCESSION NUMBER: 96304843 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8723798
TITLE: Quo vadis? Fetal tissue transplantation.
AUTHOR: Michejda M
CORPORATE SOURCE: Georgetown University Medical Center, Washington, DC 20007, USA.
SOURCE: Journal of hematotherapy, (1996 Apr) 5 (2) 185-8. Ref: 31
Journal code: 9306048. ISSN: 1061-6128.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199610
ENTRY DATE: Entered STN: 19961022
Last Updated on STN: 19990129
Entered Medline: 19961009

AB The epidemiology and biologic characteristics of fetal tissue harvested from elective and spontaneous abortions are reviewed. The use of fetal bone marrow obtained from second trimester lost pregnancies is discussed. Allogeneic **fetal tissue transplantation** carried out in **utero** is reviewed. Data on intrauterine transplantation of human fetal bone marrow obtained from second trimester lost pregnancies into baboon fetuses are presented. The viability of this tissue, its clonogenic efficiency, engraftment, use in the future, and banking are discussed.

L10 ANSWER 8 OF 14 MEDLINE on STN
ACCESSION NUMBER: 95352172 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7626187
TITLE: Some contemporary ethical considerations related to organ transplantation.
AUTHOR: Cohen B; D'Amaro J
CORPORATE SOURCE: Eurotransplant Foundation, Leiden, The Netherlands.
SOURCE: Transplant international : official journal of the European Society for Organ Transplantation, (1995) 8 (3) 238-43.
Ref: 22
Journal code: 8908516. ISSN: 0934-0874.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199509
ENTRY DATE: Entered STN: 19950921
Last Updated on STN: 19950921

Entered Medline: 19950907

AB With the increasing number of transplantable organs and tissues, as well as improvements in transplantation results, has come a severe shortage of organ donors. Consequently, new ethical dilemmas, related to the fair allocation of available organs and the use of alternative sources of donor organs, are of growing concern. Establishing fair allocation priorities is a serious problem in organ transplantation. Ethically, they should be defined by society as a whole rather than exclusively by the medical profession. Proposed solutions for the organ **donor** shortage, each with their unique ethical constraints, include the use of related **donors**, partial organ **transplantation**, cell **transplantation** using **fetal tissue**, and the use of animal organs "xenotransplantation ". Commercial trading in donor organs must be regarded as an unethical activity rather than an ethical dilemma since the donors are motivated by monetary rather than by humanitarian reasons. These ethical dilemmas could be largely avoided by an effective reduction in the severe shortage of postmortal organ donations.

L10 ANSWER 9 OF 14 MEDLINE on STN
ACCESSION NUMBER: 95090873 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7998247
TITLE: Human **fetal tissue** from spontaneous abortions as potential sources of **donor** tissue for cell **transplantation** therapy.
AUTHOR: Low W C; Eastlund T; Verfaille C; Hirschel M; Virnig B; Weese K; Norris B; Chrysler G; Peterson A; Forbes J
CORPORATE SOURCE: University of Minnesota Medical School, Minneapolis.
CONTRACT NUMBER: R24-HD-30511 (NICHD)
SOURCE: Transplantation proceedings, (1994 Dec) 26 (6) 3500. Journal code: 0243532. ISSN: 0041-1345.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199501
ENTRY DATE: Entered STN: 19950126
Last Updated on STN: 19990129
Entered Medline: 19950118

L10 ANSWER 10 OF 14 MEDLINE on STN
ACCESSION NUMBER: 92370131 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1504675
TITLE: Human embryo as a source of cells.
AUTHOR: Edwards R G
CORPORATE SOURCE: Churchill College, Cambridge, UK.
SOURCE: Bone marrow transplantation, (1992) 9 Suppl 1 90-2. Ref: 0
Journal code: 8702459. ISSN: 0268-3369.
Report No.: PIP-079084; POP-00290827.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Population
ENTRY MONTH: 199209
ENTRY DATE: Entered STN: 19921009
Last Updated on STN: 20021101
Entered Medline: 19920918

AB This paper discusses ethical issues concerning the use of fetal tissue in transplantation or for other purposes after spontaneous or elective abortion. The major problems of using fetal tissues in transplantation and research are often ethical. Despite this, the methods have been used in many countries for Digeorge's syndrome, hemopoietic disorders, brain grafting, making vaccines and many research purposes. Local and national ethical committees are now widespread, and legislation has been passed in some countries. Practitioners should be constantly aware of public concern that can arise over matters affecting conception and fetal life. **Fetal tissue transplantation** also raises many issues for **donors**, mothers and recipients, quite apart from the practitioners. Clinical teams doing abortion and investigators using

fetal tissue must be totally distinct. Requests for tissues must pass through the Tissue Bank, and its establishment has helped some deontologists (absolutist) to come to terms with the need for fetal tissue transplantation. The ethics of abortion and not fetal tissue research is often stated as the fundamental ethical problem to be solved when using fetal tissues for transplantation. In conclusion, the study suggests that legislation should regulate this field of research, that local ethical committees are essential as a source of advice, and that investigators must strive for the highest moral position and communicate their work widely and fully counsel their patients.

L10 ANSWER 11 OF 14 MEDLINE on STN
ACCESSION NUMBER: 90383751 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1698219
TITLE: Comparison of growth, neovascularization, and enzymatic function of fetal intestinal grafts in the omentum and renal capsule.
AUTHOR: Tisinai K; Shedd F; Harris R; Unthank J; Grosfeld J; Abu-Dalu K; Grosfeld J
CORPORATE SOURCE: Section of Pediatric Surgery, Indiana University Medical Center, Indianapolis.
SOURCE: Journal of pediatric surgery, (1990 Aug) 25 (8) 914-6. Journal code: 0052631. ISSN: 0022-3468.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199010
ENTRY DATE: Entered STN: 19901122
Last Updated on STN: 19960129
Entered Medline: 19901019

AB **Fetal tissues** are less immunogenic and may be a useful **donor** source for organ **transplantation**. This report compares the fate of fetal small bowel segments transplanted in the omentum and renal capsule of recipient syngeneic rats. Two-centimeter segments of fetal jejunum and ileum were obtained from 26 donor 19-day gestational age rat fetuses and transplanted into the subrenal capsule (n = 35) and omentum (n = 40) in syngeneic Fisher rats (weight, 150 g) as free grafts. No immunosuppression was used. At 2 weeks posttransplantation, the recipient rats underwent laparotomy and the grafts were evaluated for viability, growth, enzymatic function, and revascularization. Viable grafts were identified in 27 of 35 renal capsule grafts and 34 of 40 omental grafts. The order of magnitude of fetal growth in the omentum for jejunum was 16 +/- 10 versus ileum 23 +/- 9 (NS). However, in the renal capsule, ileal growth (15 +/- 6) was significantly greater than jejunum (8 +/- 5; P less than .01). Growth for both jejunal and ileal segments was greater in the omentum (P less than .02). The lumen of all omental grafts remained patent; however, 26 of 27 renal grafts had cystic dilatations and areas of obstruction. Microfil casts of the specimens showed vascular connections (neovascularization) between the graft and omentum, a normal serosal vascular pattern, and many submucosal capillary-like vessels. Maltase activity was measured in fetal grafts and compared with control pups bred on the same date as the donor animals. The grafts had a higher maltase level 33.4 +/- 34.6 mumol/min/g than controls 8.3 +/- 2.0 (P less than .005).(ABSTRACT TRUNCATED AT 250 WORDS)

L10 ANSWER 12 OF 14 MEDLINE on STN
ACCESSION NUMBER: 90066183 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2586398
TITLE: Neural fetal tissue transplantation. Should we do what we can do?.
AUTHOR: Mahowald M B
CORPORATE SOURCE: Case Western Reserve University School of Medicine, Cleveland, Ohio.
SOURCE: Neurologic clinics, (1989 Nov) 7 (4) 745-57. Journal code: 8219232. ISSN: 0733-8619. Report No.: KIE-35138.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: Bioethics; Priority Journals
ENTRY MONTH: 199001
ENTRY DATE: Entered STN: 19900328
Last Updated on STN: 20030318
Entered Medline: 19900104

AB The following factors are relevant to ethical considerations regarding **fetal tissue transplantation** for treatment of neurological disorders: the empirical status of human fetuses or abortuses, different purposes and sites of tissue retrieval or implantation, the therapeutic potential of the technique, the means through which tissue becomes available, possible motives, and possible **donors** and recipients of **transplant** tissue. After examining each of these, the author concludes that (1) only dead fetuses should be used as tissue sources, (2) decisions regarding abortion and **transplantation** should be kept separate, (3) anonymity between **donor** and recipient should be observed, and (4) buying and selling of **fetal tissue** should not be permitted.

L10 ANSWER 13 OF 14 MEDLINE on STN
ACCESSION NUMBER: 80219427 MEDLINE
DOCUMENT NUMBER: PubMed ID: 398203
TITLE: [Restoration of mixed and severe immunologic deficiency, by fetal liver and thymus graft].
Reconstitution d'un deficit immunitaire mixte et grave, par greffe de foie et de thymus foetaux.
AUTHOR: Betend B; Touraine J L; Hermier M; Francois R
SOURCE: Archives francaises de pediatrie, (1979 Dec) 36 (10) 995-1005.
Journal code: 0372421. ISSN: 0003-9764.
PUB. COUNTRY: France
DOCUMENT TYPE: (CASE REPORTS)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198008
ENTRY DATE: Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19800825

AB A male infant with severe combined immunodeficiency but normal adenosine deaminase activity for whom no suitable bone marrow donor was available was given two separate grafts of both hepatic and thymic cells, the cells for each graft being taken from the same fetus aged 13 and 10 weeks respectively. Cell mediated and partial humoral immunity was restored 330 and 400 days respectively after the second transplant. No graft-versus-host reaction was observed and both red blood cell and lymphoid chimaerism could be demonstrated. The child was kept in strict bacterial isolation from the 3rd to the 537th day of life. Thirty months after the graft, the infant is in good health but has a defect of neutrophil chemotaxis and phagocytosis which requires prophylactic benzathine penicillin in addition to gammaglobulins. **Fetal tissue transplantation** may provide an alternative treatment for patients with severe combined immunodeficiency who do not have a histocompatible **donor**.

L10 ANSWER 14 OF 14 MEDLINE on STN
ACCESSION NUMBER: 77230682 MEDLINE
DOCUMENT NUMBER: PubMed ID: 18618
TITLE: Severe combined immunodeficiency disease. Characterization of the disease and results of transplantation.
AUTHOR: Bortin M M; Rimm A A
SOURCE: JAMA : journal of the American Medical Association, (1977 Aug 15) 238 (7) 591-600.
Journal code: 7501160. ISSN: 0098-7484.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 197709
ENTRY DATE: Entered STN: 19900314
Last Updated on STN: 19950206
Entered Medline: 19770922

AB Pretransplant and posttransplant data for 69 patients with severe combined immunodeficiency disease are presented. Both B and T lymphocyte functions were absent in approximately 80% of the children and markedly depressed in the remainder. **Transplantation** of marrow from HLA genotypically identical **donors** provided the highest six-month survival rate (63%); six-month survival rates for patients who received **fetal tissue transplants** (43%) or marrow from mixed leukocyte culture (MLC) negative **donors** (38%) were significantly higher (P less than .05) than for patients treated with marrow from MLC positive **donors** (5%). Additional factors appeared to influence survival and the severity of graft-vs-host (GVH) disease. Patients more than 6 months of age had more intense GVH disease than younger patients. Survival rates were lower and GVH disease more intense when boys received transplants from girl donors than the reverse.

=> d his

(FILE 'HOME' ENTERED AT 15:34:54 ON 20 JUL 2004)

FILE 'MEDLINE' ENTERED AT 15:35:04 ON 20 JUL 2004
L1 6659 S FETAL TISSUE
L2 146532 S IN UTERO OR DONOR
L3 59250 S PERCUTAN?
L4 2 S L1 (S) L2 (S) 3
L5 0 S L1 (S) L2 (S) L3
L6 60 S L1 (S) L2
L7 23472 S INCISION
L8 0 S L1 (S) L2 (S) L7
L9 354581 S TRANSPLANT?
L10 14 S L1 (S) L2 (S) L9

=> s suction or vacuum or suc?
13720 SUCTION
37 SUCTIONS
13733 SUCTION
(SUCTION OR SUCTIONS)
9680 VACUUM
39 VACUUMS
10 VACUA
9702 VACUUM
(VACUUM OR VACUUMS OR VACUA)
1189525 SUC?
L11 1197155 SUCTION OR VACUUM OR SUC?

=> s l1 (S) l2 (S) l9 (S) l11
L12 1 L1 (S) L2 (S) L9 (S) L11

=> d ibib abs

L12 ANSWER 1 OF 1 MEDLINE on STN
ACCESSION NUMBER: 96393740 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8800513
TITLE: A mathematical model for the estimation of human embryonic and fetal age.
AUTHOR: Evtouchenko L; Studer L; Spenger C; Dreher E; Seiler R W
CORPORATE SOURCE: Department of Neurosurgery, University of Bern, Inselspital, Switzerland.
SOURCE: Cell transplantation, (1996 Jul-Aug) 5 (4) 453-64.
Journal code: 9208854. ISSN: 0963-6897.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199702
ENTRY DATE: Entered STN: 19970305
Last Updated on STN: 19970305
Entered Medline: 19970220
AB Precise determination of **donor** age in human embryonic and **fetal tissue** is crucial for cell **transplantation** due to the existence of distinct time windows within which

successful grafting is possible. This study demonstrates that between 4-12 wk postconception embryonic and fetal age can be estimated based on various morphometric parameters measured on a routine basis in suction abortion material. The greatest length, the neck-rump length, the foot length, and the proximal and distal arm and leg length were correlated with the anamnestic and ultrasonographically estimated age. Multivariate regression analyses showed a linear correlation between age and the logarithmic value of the various morphometric parameters. The best correlation was found for a mathematical model combining the limb parameters ($r = 0.904$; $p < 0.001$; $n = 37$). A prospective follow-up study ($n = 40$) was carried out to test the validity of the mathematical model. A high correlation was found between the calculated age and the estimated age based on anamnestic data ($r = 0.749$, $p < 0.001$). Outliers due to errors in the anamnestic data were readily identified by comparing anamnestic with calculated age. This method allows determination of embryonic and fetal age within and beyond the age group of the Carnegie classification and may, therefore, be useful for the needs of experimental and clinical cell transplantation.

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     (FILE 'HOME' ENTERED AT 15:34:54 ON 20 JUL 2004)

     FILE 'MEDLINE' ENTERED AT 15:35:04 ON 20 JUL 2004
L1          6659 S FETAL TISSUE
L2        146532 S IN UTERO OR DONOR
L3         59250 S PERCUTAN?
L4             2 S L1 (S) L2 (S) 3
L5             0 S L1 (S) L2 (S) L3
L6            60 S L1 (S) L2
L7         23472 S INCISION
L8             0 S L1 (S) L2  (S) L7
L9        354581 S TRANSPLANT?
L10           14 S L1 (S) L2  (S) L9
L11      1197155 S SUCTION OR VACUUM OR SUC?
L12            1 S L1 (S) L2  (S) L9 (S) L11

=> s suction or vacuum or suc? or remov?
          13720 SUCTION
             37 SUCTIONS
          13733 SUCTION
                (SUCTION OR SUCTIONS)
           9680 VACUUM
             39 VACUUMS
             10 VACUA
           9702 VACUUM
                (VACUUM OR VACUUMS OR VACUA)
        1189525 SUC?
         255745 REMOV?
L13     1406689 SUCTION OR VACUUM OR SUC? OR REMOV?

=> s l1 (S) l2  (S) l9 (S) l13
L14            1 L1 (S) L2 (S) L9 (S) L13

=> d ibib abs

L14  ANSWER 1 OF 1     MEDLINE on STN
ACCESSION NUMBER:    96393740     MEDLINE
DOCUMENT NUMBER:     PubMed ID: 8800513
TITLE:               A mathematical model for the estimation of human embryonic
                     and fetal age.
AUTHOR:              Evtouchenko L; Studer L; Spenger C; Dreher E; Seiler R W
CORPORATE SOURCE:    Department of Neurosurgery, University of Bern,
                     Inselspital, Switzerland.
SOURCE:              Cell transplantation, (1996 Jul-Aug) 5 (4) 453-64.
                     Journal code: 9208854. ISSN: 0963-6897.
PUB. COUNTRY:        United States
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
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ENTRY MONTH: 199702
ENTRY DATE: Entered STN: 19970305
Last Updated on STN: 19970305
Entered Medline: 19970220

AB Precise determination of **donor** age in human embryonic and **fetal tissue** is crucial for cell **transplantation** due to the existence of distinct time windows within which **successful** grafting is possible. This study demonstrates that between 4-12 wk postconception embryonic and fetal age can be estimated based on various morphometric parameters measured on a routine basis in suction abortion material. The greatest length, the neck-rump length, the foot length, and the proximal and distal arm and leg length were correlated with the anamnestic and ultrasonographically estimated age. Multivariate regression analyses showed a linear correlation between age and the logarithmic value of the various morphometric parameters. The best correlation was found for a mathematical model combining the limb parameters ($r = 0.904$; $p < 0.001$; $n = 37$). A prospective follow-up study ($n = 40$) was carried out to test the validity of the mathematical model. A high correlation was found between the calculated age and the estimated age based on anamnestic data ($r = 0.749$, $p < 0.001$). Outliers due to errors in the anamnestic data were readily identified by comparing anamnestic with calculated age. This method allows determination of embryonic and fetal age within and beyond the age group of the Carnegie classification and may, therefore, be useful for the needs of experimental and clinical cell transplantation.

```
=> s ?cutan?
L15     247721 ?CUTAN?

=> d his

     (FILE 'HOME' ENTERED AT 15:34:54 ON 20 JUL 2004)

     FILE 'MEDLINE' ENTERED AT 15:35:04 ON 20 JUL 2004
L1         6659 S FETAL TISSUE
L2       146532 S IN UTERO OR DONOR
L3        59250 S PERCUTAN?
L4            2 S L1 (S) L2 (S) 3
L5            0 S L1 (S) L2 (S) L3
L6           60 S L1 (S) L2
L7        23472 S INCISION
L8            0 S L1 (S) L2  (S) L7
L9       354581 S TRANSPLANT?
L10          14 S L1 (S) L2  (S) L9
L11     1197155 S SUCTION OR VACUUM OR SUC?
L12           1 S L1 (S) L2  (S) L9 (S) L11
L13     1406689 S SUCTION OR VACUUM OR SUC? OR REMOV?
L14           1 S L1 (S) L2  (S) L9 (S) L13
L15      247721 S ?CUTAN?

=> s l1 (S) l2  (S) l9 (S) l15
L16           0 L1 (S) L2 (S) L9 (S) L15

=> s l1 (l) l2  (l) l9 (l) l15
L17           0 L1 (L) L2 (L) L9 (L) L15

=> s l1 (l) l2  (l) l9 (l) l13
L18          21 L1 (L) L2 (L) L9 (L) L13

=> d 1-21 ibib abs

L18  ANSWER 1 OF 21     MEDLINE on STN
ACCESSION NUMBER:   2004262523     IN-PROCESS
DOCUMENT NUMBER:    PubMed ID: 15161332
TITLE:              Is there a future for neural transplantation?.
AUTHOR:             Harrower Timothy P; Barker Roger A
CORPORATE SOURCE:   Cambridge Centre for Brain Repair, Forvie Site, Cambridge,
                    UK.. DRSHarrower@aol.com
SOURCE:             BioDrugs : clinical immunotherapeutics, biopharmaceuticals
                    and gene therapy, (2004) 18 (3) 141-53.
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Journal code: 9705305. ISSN: 1173-8804.
PUB. COUNTRY: New Zealand
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20040527
Last Updated on STN: 20040629

AB Traditionally neural **transplantation** has had as its central tenet the replacement of missing neurons that have been lost because of neurodegenerative processes, as exemplified by diseases **such** as Parkinson disease (PD). However, the effectiveness and widespread application of this approach clinically has been limited, primarily because of the poor **donor** supply of human fetal neural tissue and the incomplete neurobiological understanding of the circuit reconstruction required to normalize function in these diseases. So, in PD the progress from promising neural **transplantation** in animal models to proof-of-principle, open-labeled clinical **transplants**, to randomized, placebo-controlled studies of neural **transplantation** has not been straightforward. The emergence of previously undescribed adverse effects and lack of significant functional advantage in recent clinical studies has been disappointing and has served to cast a new, and perhaps more realistic, perspective on this treatment approach. In fact, there have been calls by some involved in neural **transplantation** to return to the drawing board before pressing on with further clinical trials, and the return to basic experimentation. This therefore precipitates the question - is there a future for neural **transplantation**? It is important to remember that there are a number of possible explanations for the disappointing results from the recent clinical trials in PD, ranging from the mode of **transplantation** to patient selection. Nevertheless, almost irrespective of these reasons for the current trial results, there have always been significant practical and ethical problems with using human **fetal tissue**, and so a number of alternative cell sources have been investigated. These alternative sources include stem cells, which are attractive for cell-based therapies because of their potential ease of isolation, propagation and manipulation, and their ability in some cases to migrate to areas of pathology and differentiate into specific and appropriate cell types. Furthermore, the availability of stem cells derived from non-embryonic sources (e.g. adult stem cells derived from the sub-ventricular zone) has **removed** some of the ethical limitations associated with the use of embryonic human tissue. These potentially beneficial aspects of stem cells means that there is a future for neural **transplantation** as a means of treating patients with a range of neurological disorders, although whether this will ever translate into a truly effective, widely available therapy remains unknown.

L18 ANSWER 2 OF 21 MEDLINE on STN
ACCESSION NUMBER: 2003573184 IN-PROCESS
DOCUMENT NUMBER: PubMed ID: 14653615
TITLE: Staging and preparation of human fetal striatal tissue for neural transplantation in Huntington's disease.
AUTHOR: Rosser A E; Barker R A; Armstrong R J E; Elneil S; Jain M; Hurelbrink C B; Prentice A; Carne C; Thornton S; Hutchinson H; Dunnett S B
CORPORATE SOURCE: School of Biosciences, Cardiff University, PO Box 911, Museum Av, Cardiff CF10 3US, Wales, UK.. RosserAE@cf.ac.uk
SOURCE: Cell transplantation, (2003) 12 (7) 679-86.
Journal code: 9208854. ISSN: 0963-6897.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20031216
Last Updated on STN: 20031216

AB **Transplantation** of human fetal central nervous system tissue has been shown to be of benefit in Parkinson's disease, and is currently being explored as a therapeutic option in Huntington's disease. The **success** of a neural **transplant** is dependent on a number of factors, including the requirement that **donor** cells are harvested within a given developmental window and that the cell

preparation protocols take account of the biological parameters identified in animal models. Although many of the criteria necessary for a **successful** neural **transplant** have been defined in animal models, ultimately they must be validated in human studies, and some issues can only ever be addressed in human studies. Furthermore, because neural **transplantation** of human **fetal tissue** is limited to small numbers of patients in any one surgical center, largely due to practical constraints, it is crucial that tissue preparation protocols are clearly defined and reproducible, so that (i) multicenter trials are possible and are based on consistent tissue preparation parameters, and (ii) results between centers can be meaningfully analyzed. Here we describe the preparation of human fetal striatum for neural **transplantation** in Huntington's disease, and report on the validation of a method for estimating the developmental stage of the fetus based on direct morphometric measurements of the embryonic tissue.

L18 ANSWER 3 OF 21 MEDLINE on STN
ACCESSION NUMBER: 2003479695 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14557753
TITLE: Engraftment and tumor formation after allogeneic in utero transplantation of primate embryonic stem cells.
COMMENT: Comment in: Transplantation. 2003 Oct 15;76(7):1011-2. PubMed ID: 14584499
AUTHOR: Asano Takayuki; Ageyama Naohide; Takeuchi Koichi; Momoeda Mikio; Kitano Yoshihiro; Sasaki Kyoko; Ueda Yasuji; Suzuki Yutaka; Kondo Yasushi; Torii Ryuzo; Hasegawa Mamoru; Ookawara Shigeo; Harii Kiyonori; Terao Keiji; Ozawa Keiya; Hanazono Yutaka
CORPORATE SOURCE: Division of Genetic Therapeutics, Jichi Medical School, Tochigi, Japan.
SOURCE: Transplantation, (2003 Oct 15) 76 (7) 1061-7. Journal code: 0132144. ISSN: 0041-1337.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200312
ENTRY DATE: Entered STN: 20031015
Last Updated on STN: 20031219
Entered Medline: 20031202
AB BACKGROUND: To achieve human embryonic stem (ES) cell-based **transplantation** therapies, allogeneic **transplantation** models of nonhuman primates would be useful. We have prepared cynomolgus ES cells genetically marked with the green fluorescent protein (GFP). The cells were **transplanted** into the allogeneic fetus, taking advantage of the fact that the fetus is so immunologically immature as not to induce immune responses to **transplanted** cells and that **fetal tissue** compartments are rapidly expanding and thus providing space for the engraftment. METHODS: Cynomolgus ES cells were genetically modified to express the GFP gene using a simian immunodeficiency viral vector or electroporation. These cells were **transplanted** in **utero** with ultrasound guidance into the cynomolgus fetus in the abdominal cavity (n=2) or liver (n=2) at the end of the first trimester. Three fetuses were delivered 1 month after **transplantation**, and the other, 3 months after **transplantation**. **Fetal tissues** were examined for **transplanted** cell progeny by quantitative polymerase chain reaction and in situ polymerase chain reaction of the GFP sequence. RESULTS: A fluorescent tumor, obviously derived from **transplanted** ES cells, was found in the thoracic cavity at 3 months after **transplantation** in one fetus. However, **transplanted** cell progeny were also detected (approximately 1%) without teratomas in multiple **fetal tissues**. The cells were solitary and indistinguishable from surrounding host cells. CONCLUSIONS: **Transplanted** cynomolgus ES cells can be engrafted in allogeneic fetuses. The cells will, however, form a tumor if they "leak" into an improper space **such** as the thoracic cavity.

L18 ANSWER 4 OF 21 MEDLINE on STN
ACCESSION NUMBER: 2002599222 MEDLINE

DOCUMENT NUMBER: PubMed ID: 12344424
TITLE: Chapter 173, Sections 1-2 of the 1989 Session Laws, 29 March 1989.
AUTHOR: Anonymous
CORPORATE SOURCE: United States. North Dakota.
SOURCE: Annual review of population law, (1989) 16 44, 323-4.
Journal code: 8008840. ISSN: 0364-3417.
Report No.: ARPL-000475; PIP-078475; POP-00248510.
PUB. COUNTRY: United States
DOCUMENT TYPE: (LEGISLATION)
LANGUAGE: English
FILE SEGMENT: Population
ENTRY MONTH: 199603
ENTRY DATE: Entered STN: 20021101
Last Updated on STN: 20021101
Entered Medline: 19960307

AB In March of 1989, North Dakota passed legislation covering experimentation using live or dead fetuses. The law prohibits the use of any live human fetus, before or after birth, for any kind of experimentation. A human fetus can be studied while in **utero** if **such** procedures do not substantially jeopardize the life or health of the fetus and provided that there are no plans to abort said fetus. No fetus or newborn child or **fetal tissue** or organ may be used for research or **transplantation**. However, diagnostic or remedial procedures designed to determine or preserve the life or health of the fetus or the mother are allowed. No experiments can be conducted on a dead fetus resulting from an occurrence other than an induced abortion without the written consent of the mother who must be at least 18 years old. No fetus or **fetal tissue** resulting from an induced abortion can be used in **transplantation** except for diagnostic or remedial procedures for said fetus or its mother. No abortion can be performed if all or part of the consideration for the abortion is that fetal organs or tissue are to be used for **transplantation** or experimentation. No fetus or fetal organs (including embryos and neonates) can be sold or given away for a use in violation of this law.

L18 ANSWER 5 OF 21 MEDLINE on STN
ACCESSION NUMBER: 2001615282 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11645701
TITLE: Ethics, public policy, and human fetal tissue transplantation research.
AUTHOR: Childress James F
SOURCE: Kennedy Institute of Ethics journal, (1991 Jun) 1 (2) 93-121.
Journal code: 9109135. ISSN: 1054-6863.
Report No.: KIE-33408.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Bioethics
ENTRY MONTH: 199109
ENTRY DATE: Entered STN: 20011105
Last Updated on STN: 20021211
Entered Medline: 19910917

AB This article focuses on the deliberations of the National Institutes of Health Human **Fetal Tissue Transplantation** Research Panel in 1988. It explores various arguments for and against the use of **fetal tissue** for **transplantation** research, following elective abortion, and for and against the use of federal funds for **such** research. After examining the relevance of various positions on the moral status of the fetus and the morality of abortion, the article critically examines charges that **such** research, especially with federal funds, would involve complicity in the moral evil of abortion, would legitimate abortion practices, and would provide incentives for abortions. Finally, it considers whether the donation model is appropriate for the transfer of human **fetal tissue** and whether the woman who chooses to have an abortion is the apppropriate **donor** of the tissue.

L18 ANSWER 6 OF 21 MEDLINE on STN

ACCESSION NUMBER: 2000402190 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10904957
TITLE: [Neural transplants en Parkinson disease: clinical results of 10 years of experience. Group of Neural Transplants of the CPH].
Transplantes neurales en la enfermedad de Parkinson: resultados clinicos tras 10 anos de experiencia. Grupo de Trasplantes Neurales de la CPH.
AUTHOR: Lopez-Lozano J J; Mata M; Bravo G
CORPORATE SOURCE: Departamento de Neurologia, Universidad Autonoma de Madrid, Espana.. jlozano@cexp.cph.es
SOURCE: Revista de neurologia, (2000 Jun 1-15) 30 (11) 1077-83.
Journal code: 7706841. ISSN: 0210-0010.
PUB. COUNTRY: Spain
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Spanish
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200008
ENTRY DATE: Entered STN: 20000901
Last Updated on STN: 20000901
Entered Medline: 20000822

AB INTRODUCTION: At the end of the 1970s people considered the possibility that **transplants** might be useful to replace degenerate specific cell populations, **such** as the mesencephalic dopaminergic neurones in Parkinson's disease (PD). Since then this has become an experimental alternative treatment for patients with degenerative diseases. The history of **transplants** of catecholamine producing tissues within the brain of patients with PD started in 1985, when Backlund et al published the results of the first implants of autologous adrenal medulla in two patients with Parkinsonism. Since then, many patients throughout the world have benefited from the results obtained using this method. Two main types of tissue have been used in this method: autologous adrenal medulla and human foetal ventral mesencephalic tissue. DEVELOPMENT: In this paper we first review the clinical effects of the diverse types of **transplant** done to date. Then in the second part we give a summary of the clinical results obtained by our group with the different types of **transplant** carried out. We explain their evolution, original hypothesis and justify the reasons which led us to use three different types of **donor** material: autologous adrenal medulla, **fetal tissue** and adrenal medulla co-incubated with peripheral nerve. Then, after showing that the clinical improvement is different depending on the type of tissue **transplanted**, we comment on the probable reason for the improvement seen in patients with implants. CONCLUSION: The **transplantation** of nervous tissue seems to us to be no longer an experimental alternative for the treatment of PD but has become an effective, lasting treatment for patients with Parkinson's disease.

L18 ANSWER 7 OF 21 MEDLINE on STN
ACCESSION NUMBER: 2000260449 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10800655
TITLE: Engineering hematopoietic grafts using elutriation and positive cell selection to reduce GVHD.
AUTHOR: Noga S J
CORPORATE SOURCE: Johns Hopkins Oncology Center, Baltimore, MD 21205, USA.
CONTRACT NUMBER: CA 15396 (NCI)
CA67787 (NCI)
HL 46533 (NHLBI)
SOURCE: Cancer treatment and research, (1999) 101 311-30. Ref: 60
Journal code: 8008541. ISSN: 0927-3042.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200006
ENTRY DATE: Entered STN: 20000714
Last Updated on STN: 20000714
Entered Medline: 20000630

AB A systematic approach to hematopoietic graft manipulation has minimized

several of the variables inherent to allogeneic BMT. Through this approach, we have been able to significantly impact on morbidity and quality of life following allogeneic **transplantation**. Acute and chronic GVHD, blood product and antibiotic usage, in patient hospitalization, acuity, costs and survival (especially in patients older than 40) have been improved. The HLA barrier still presents a formidable obstacle to achieving a more widespread use of this therapy. The complications encountered in HLA matched/TCD grafts occur with even greater magnitude in the HLA-mismatched or unrelated **donor** setting. Several centers are now engaged in studies using TCD grafts that are augmented with high doses of CD34+ cells to ensure engraftment while reducing the incidence of GVHD (50-53). Mobilized allogeneic PBSC appear to be an excellent source of stem cells for BMT (5,6). The earlier reports showed decreased rates of GVHD, despite having T cell burdens 10 times higher than those found in unmanipulated bone marrow. However, several of these centers now report an unacceptably high incidence of chronic GVHD (along with its attendant morbidity) following allogeneic PBSC **transplantation** (54-55). Initial results of TCD in these PBSC grafts using CD34+ selection are disappointing in that recipients developed unexpectedly high incidences of both acute and chronic GVHD (56). No doubt, significant differences exist between marrow and PBSC ancillary cell populations. For example, two laboratories now report the presence of natural suppressor cells in these allogeneic PBSC products in both mice (57) and humans (58). Thus, the same, step-wise approach would be expected to improve graft performance when using PBSC, cord blood, **fetal tissue**, xenografts or genetically engineered products as a stem cell source. Indeed, there are new reports of improved clinical outcome (especially in the incidence of GVHD) in the PMRD setting using both CD34+ selected (59) and sequential CD34+/CD2+ selected (60) PBSC grafts. It is hoped that future graft engineering approaches will be as **successful** as previous studies and will extend this form of therapy to an even larger patient population.

L18 ANSWER 8 OF 21 MEDLINE on STN
ACCESSION NUMBER: 1999439259 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10511241
TITLE: Isolation and intracerebral grafting of nontransformed multipotential embryonic human CNS stem cells.
AUTHOR: Vescovi A L; Gritti A; Galli R; Parati E A
CORPORATE SOURCE: National Neurological Institute C. Besta, Milan, Italy.. vescovi@tin.it
SOURCE: Journal of neurotrauma, (1999 Aug) 16 (8) 689-93. Journal code: 8811626. ISSN: 0897-7151.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199911
ENTRY DATE: Entered STN: 20000111
Last Updated on STN: 20000111
Entered Medline: 19991124

AB In this work, we show that the embryonic human brain contains multipotent central nervous system (CNS) stem cells, which may provide a continuous, standardized source of human neurons that could virtually eliminate the use of primary human fetal brain tissue for intracerebral **transplantation**. Multipotential stem cells can be isolated from the developing human CNS in a reproducible fashion and can be exponentially expanded for longer than 2 years. This allows for the establishment of continuous, nontransformed neural cell lines, which can be frozen and banked. By clonal analysis, reverse transcription polymerase chain reaction, and electrophysiological assay, we found that over **such** long-term culturing these cells retain both multipotentiality and an unchanged capacity for the generation of neuronal cells, and that they can be induced to differentiate into catechlaminergic neurons. Finally, when **transplanted** into the brain of adult rodents immunosuppressed by cyclosporin A, human CNS stem cells migrate away from the site of injection and differentiate into neurons and astrocytes. No tumor formation was ever observed. Aside from depending on scarce human neural **fetal tissue**, the use of human embryonic CNS stem cells for clinical neural **transplantation** should provide a reliable solution to some of the major problems that

pertain to this field, and should allow determination of the safety characteristics of the **donor** cells in terms of tumorigenicity, viability, sterility, and antigenic compatibility far in advance of the scheduled day of surgery.

L18 ANSWER 9 OF 21 MEDLINE on STN
ACCESSION NUMBER: 97176549 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9024088
TITLE: Tissue distribution of transplanted fetal liver cells in the human fetal recipient.
AUTHOR: Westgren M; Ek S; Bui T; Jansson B; Kjaeldgaard A; Markling L; Nennesmo I; Seiger A; Sarby B; Thornstrom S; Ringden O
CORPORATE SOURCE: Department of Obstetrics and Gynecology, Huddinge University Hospital, Sweden.
SOURCE: American journal of obstetrics and gynecology, (1997 Jan) 176 (1 Pt 1) 49-53.
Journal code: 0370476. ISSN: 0002-9378.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199703
ENTRY DATE: Entered STN: 19970321
Last Updated on STN: 19970321
Entered Medline: 19970313

AB OBJECTIVE: Our purpose was to study the tissue distribution and concentrations of **transplanted** fetal liver cells in the human fetus. STUDY DESIGN: Radiolabeled indium 111 fetal liver cells were injected in vivo under ultrasonographic guidance into 10 normal fetuses (13 to 17 weeks of gestation) before a prostaglandin abortion. Six fetuses were injected intraperitoneally and four intracardially. Another two fetuses serving as controls were injected with indium-labeled maternal plasma. The fetuses were all alive, at least until 6 hours before expulsion. After expulsion the fetuses were dissected, and radioactivity was measured in various **fetal tissues**. Results for each tissue were expressed as percentages of the total injected dose. RESULTS: Significantly greater uptake of fetal liver cells in the liver, spleen, thymus, kidney, lung, and placenta was obtained with intracardiac than with intraperitoneal injection. Skeletal uptake did not differ in relation to mode of administration. With intracardiac injection uptake was greater in **such** parenchymal organs as the liver, spleen, and thymus (4.9%, 4.0%, and 3.9%, respectively). Uptake in the rib, clavicle, humerus, and sternum was 2.7%, 1.8%, 2.1%, and 1.1%, respectively. Placental uptake was 0.1%. The intracardiac route yielded a higher concentration of cells in different fetal organs than did injection of only radiolabeled maternal plasma, suggesting an active uptake of cells in different fetal hematopoietic organs. CONCLUSION: The mode of administration of fetal liver cells seems to be a major determinant of **donor** cell concentration in the **transplanted** human fetus and may be a significant determinant of the rate of **successful** engraftment.

L18 ANSWER 10 OF 21 MEDLINE on STN
ACCESSION NUMBER: 97153383 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9000673
TITLE: Discordant xenogeneic neonatal thymic transplantation can induce donor-specific tolerance.
AUTHOR: Khan A; Sergio J J; Zhao Y; Pearson D A; Sachs D H; Sykes M
CORPORATE SOURCE: Transplantation Biology Research Center, Massachusetts General Hospital/Harvard Medical School, Boston 02129, USA.
CONTRACT NUMBER: 1K11AI01261-01 (NIAID)
SOURCE: Transplantation, (1997 Jan 15) 63 (1) 124-31.
Journal code: 0132144. ISSN: 0041-1337.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199702
ENTRY DATE: Entered STN: 19970227
Last Updated on STN: 19970227
Entered Medline: 19970213

AB The limited supply of human organs for **transplantation** necessitates the development of methods leading to acceptance of xenografts. To avoid the hazards of the high-dose chronic immunosuppressive pharmacotherapy which would otherwise be required for **successful** xenografting, it would be desirable to induce permanent tolerance to xenogeneic **donors**. We have recently demonstrated that xenogeneic **donor**-specific tolerance can be induced by **transplanting** fetal pig thymic and hematopoietic tissue into thymectomized, T cell-depleted, and natural killer-cell-depleted mice, or into natural killer cell-depleted nude mice. We have now extended these studies by replacing **fetal tissue** with neonatal pig thymic and hematopoietic tissue, and by examining the in vivo responses of reconstituted mice to pig skin grafts. Neonatal tissue was studied because it might be more practicable than **fetal tissue** for the purpose of **transplantation** to primates. BALB/c nu/nu mice **transplanted** with neonatal (<24-hr-old) pig thymus and spleen fragments developed circulating mouse CD4+ cells. The pig thymus grafts were necessary for mouse T-cell development, as CD4 recovery did not occur in recipients of neonatal pig splenic tissue alone. The CD4+ cells that developed included Vbeta8.1/2+ T cells in similar proportions as in BALB/c mice, and Vbeta11+ and Vbeta5+ CD4 T cells were deleted almost as completely as in normal BALB/c mice. This deletion was detected among CD4 single-positive graft thymocytes. In 9 of 12 evaluable animals, mixed lymphocyte responses demonstrated tolerance to **donor**-type pig SLA antigens, with responsiveness to alloantigens and/or third-party pig xenoantigens. Furthermore, grafting of neonatal pig thymus conferred the ability to reject allogeneic mouse skin in 7 of 10 animals. In addition, 7 of 10 animals accepted paternal (**donor** SLA-matched) skin (median survival time [MST] > 100 days), whereas 4 of 4 animals rejected third-party SLA-mismatched pig skin (MST=40.5 days). We conclude that neonatal pig thymi **transplanted** to BALB/c nu/nu mice can support the development of mouse CD4+ cells that are functional and specifically tolerant to **donor**-type pig antigens.

L18 ANSWER 11 OF 21 MEDLINE on STN
ACCESSION NUMBER: 96393740 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8800513
TITLE: A mathematical model for the estimation of human embryonic and fetal age.
AUTHOR: Evtouchenko L; Studer L; Spenger C; Dreher E; Seiler R W
CORPORATE SOURCE: Department of Neurosurgery, University of Bern, Inselspital, Switzerland.
SOURCE: Cell transplantation, (1996 Jul-Aug) 5 (4) 453-64. Journal code: 9208854. ISSN: 0963-6897.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199702
ENTRY DATE: Entered STN: 19970305
Last Updated on STN: 19970305
Entered Medline: 19970220

AB Precise determination of **donor** age in human embryonic and **fetal tissue** is crucial for cell **transplantation** due to the existence of distinct time windows within which **successful** grafting is possible. This study demonstrates that between 4-12 wk postconception embryonic and fetal age can be estimated based on various morphometric parameters measured on a routine basis in **suction** abortion material. The greatest length, the neck-rump length, the foot length, and the proximal and distal arm and leg length were correlated with the anamnestic and ultrasonographically estimated age. Multivariate regression analyses showed a linear correlation between age and the logarithmic value of the various morphometric parameters. The best correlation was found for a mathematical model combining the limb parameters ($r = 0.904$; $p < 0.001$; $n = 37$). A prospective follow-up study ($n = 40$) was carried out to test the validity of the mathematical model. A high correlation was found between the calculated age and the estimated age based on anamnestic data ($r = 0.749$, $p < 0.001$). Outliers due to errors in the anamnestic data were readily identified by comparing anamnestic with calculated age. This method allows determination of embryonic and fetal age within and beyond the age group of the Carnegie

classification and may, therefore, be useful for the needs of experimental and clinical cell **transplantation**.

L18 ANSWER 12 OF 21 MEDLINE on STN
ACCESSION NUMBER: 96350807 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8714776
TITLE: Development of the human striatum: implications for fetal striatal transplantation in the treatment of Huntington's disease.
AUTHOR: Freeman T B; Sanberg P R; Isacson O
CORPORATE SOURCE: Department of Pharmacology and Experimental Therapeutics, University of South Florida, Tampa 33606, USA.
CONTRACT NUMBER: NS29178 (NINDS)
SOURCE: Cell transplantation, (1995 Nov-Dec) 4 (6) 539-45. Ref: 61
Journal code: 9208854. ISSN: 0963-6897.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199610
ENTRY DATE: Entered STN: 19961025
Last Updated on STN: 20000303
Entered Medline: 19961017

AB Fetal neural **transplantation** has recently been demonstrated to ameliorate motor and other behavioral deficits in animals models of Huntington's disease, and reconstruct many of the damaged striatal circuits. However, there has been significant variability in the histological appearance of these grafts, most likely related to differences of the regions of dissection of the **donor** tissue. Selective dissection and **transplantation** of the lateral ventricular eminence in rodents has resulted in grafts consisting of primarily striatal-like tissue. This data, combined with data from our own and other laboratories has led to a description of the development of human striatum, with a particular emphasis on the relevance of human striatal development to the field of **fetal tissue transplantation** for the treatment of Huntington's disease. If the goal of **transplantation** is to graft GABAergic striatal projection neurons, it is our impression that optimal grafting results will occur when **transplants** are derived from the lateral ventricular eminence and the lateral aspect of the body of the ventricular eminence anterior to the foramen of Monro. Optimal results are likely to occur when **donor** ages range from Stage 19 to 23, with possible graft **success** when **donor** age extends to as late as postovulatory week 22.

L18 ANSWER 13 OF 21 MEDLINE on STN
ACCESSION NUMBER: 94309086 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8035438
TITLE: Attitudes of women to fetal tissue research.
AUTHOR: Anderson F; Glasier A; Ross J; Baird D T
CORPORATE SOURCE: University of Edinburgh's Department of Obstetrics and Gynaecology.
SOURCE: Journal of medical ethics, (1994 Mar) 20 (1) 36-40.
Journal code: 7513619. ISSN: 0306-6800.
Report No.: KIE-43400.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Bioethics; Priority Journals
ENTRY MONTH: 199408
ENTRY DATE: Entered STN: 19940825
Last Updated on STN: 20030318
Entered Medline: 19940815

AB The use of human **fetal tissue** for scientific research has enormous potential but is subject to government legislation. In the United Kingdom the Polkinghorne Committee's guidelines were accepted by the Department of Health in 1990. These guidelines set out to protect women undergoing termination of pregnancy from exploitation but in so doing may significantly restrict potential research. Although the

committee took evidence from a wide variety of experts they did not seek the views of the general public. We asked 108 women about to have a therapeutic abortion; 167 women who had had a pregnancy terminated in the past, and 419 women who had never had an abortion, their views on research using human **fetal tissue**. Regardless of their past experiences the women were overwhelmingly in favour of research using **fetal tissue** (94 per cent). They made little distinction between basic research and research with obvious clinical relevance and supported the concept of using **transplanted fetal tissue** for the treatment of adult disease **such** as Parkinsonism. Women about to undergo an abortion were significantly more likely ($p < 0.001$) to approve of all types of research including that aimed at improving methods of abortion and research using live fetuses in **utero**.

L18 ANSWER 14 OF 21 MEDLINE on STN
ACCESSION NUMBER: 91294243 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2066374
TITLE: Cellular replacement therapy for neurologic disorders: potential of genetically engineered cells.
AUTHOR: Chen L S; Ray J; Fisher L J; Kawaja M D; Schinstine M; Kang U J; Gage F H
CORPORATE SOURCE: Department of Neurosciences, University of California, San Diego, La Jolla 92093.
CONTRACT NUMBER: NS01411 (NINDS)
SOURCE: Journal of cellular biochemistry, (1991 Mar) 45 (3) 252-7. Ref: 32
Journal code: 8205768. ISSN: 0730-2312.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199108
ENTRY DATE: Entered STN: 19910901
Last Updated on STN: 19970203
Entered Medline: 19910809

AB Neural **transplantation**, a mode of cellular replacement, has been used as a therapeutic trial for Parkinson's disease. Studies indicate that tonic release of the metabolites from the graft that can be utilized by the host brain, is likely to be the major mechanism responsible for the therapeutic effect. The use of **fetal tissue** is complicated by ethical controversy and immunological incompatibility. Autografting adult tissue has not been **successful** mainly due to poor survival. Genetically engineered cells are promising alternative sources of **donor** cells. We have investigated the potential of primary skin fibroblasts as **donor** cells for intracerebral grafting. Primary skin fibroblasts survive in the brain and remain in situ. A number of genes (nerve growth factor, tyrosine hydroxylase, glutamic acid decarboxylase, and choline acetyltransferase) have been **successfully** introduced and expressed in the primary fibroblasts. The L-dopa-secreting primary fibroblasts exhibited a behavioral effect in a rat model of Parkinson's disease up to 8 weeks after being grafted into denervated striatum. Factors that can maximize gene transfer, transgene expression, and fibroblast survival in the brain make up the future direction of investigation.

L18 ANSWER 15 OF 21 MEDLINE on STN
ACCESSION NUMBER: 89334222 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2667429
TITLE: [Prenatal diagnosis of severe and hereditary immune deficiencies].
Diagnostic prenatal des deficits immunitaires graves et hereditaires.
AUTHOR: Durandy A; Griscelli C
SOURCE: Annales de pediatrie, (1989 Jun) 36 (6) 403-7. Ref: 14
Journal code: 2984696R. ISSN: 0066-2097.
PUB. COUNTRY: France
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)

(REVIEW, TUTORIAL)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198908
ENTRY DATE: Entered STN: 19900309
Last Updated on STN: 19900309
Entered Medline: 19890830

AB Antenatal diagnosis is now available for most severe inherited immune deficiencies. Several techniques are used: the development of methods for sampling **fetal tissue** as soon as the tenth week of gestation has made possible the antenatal diagnosis of immune deficiencies associated with detectable enzyme defects, and, in combination with recent molecular biology techniques, can be expected to allow early identification of severe combined immune deficiencies due to the absence of T lymphocyte precursors, agammaglobulinemia, and some instances of X-linked chronic granulomatous disease. A great number of immune deficiencies can be identified by direct studies of fetal lymphocytes or polymorphonuclear leukocytes in fetal blood sampled by fetoscopy at the twentieth week of gestation. Fetal blood studies combined with skin biopsy examination allows the diagnosis of immune defects associated with partial albinism **such** as Chediak-Higashi disease. No reliable antenatal diagnostic method is as yet available for two severe diseases: Wiskott-Aldrich syndrome, that can be expected to become detectable in **utero** using molecular biology techniques, and ataxia-telangiectasia. Antenatal diagnosis of a severe immune deficiency does not necessarily indicate termination of the pregnancy as in some cases, **such** as severe combined immune deficiencies, HLA-identical bone marrow **transplantation** at birth or in **utero** is permanently **successful** in over 90% of cases.

L18 ANSWER 16 OF 21 MEDLINE on STN
ACCESSION NUMBER: 88314195 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3044989
TITLE: Bone marrow transplantation in the treatment of severe immunodeficiencies: possibilities and problems.
AUTHOR: Vossen J M
CORPORATE SOURCE: Department of Pediatrics, University Hospital Leiden, The Netherlands.
SOURCE: Immunological investigations, (1988 Apr) 17 (2) 135-46.
Ref: 20
Journal code: 8504629. ISSN: 0882-0139.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198809
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880929

AB Infants and children suffering from severe primary immunodeficiencies may be cured by bone marrow **transplantation** from a healthy **donor**. Data obtained in 14 European centers show that about 60% of the patients are surviving disease-free, if they were grafted with bone marrow cells from an HLA-identical related **donor**. Results of **transplantation** of T-cell depleted bone marrow from an HLA-haploidentical related **donor** were also excellent in infants with severe combined immunodeficiency, with 60% recovery. This therapy is superior to **transplantation** of **fetal tissues** . HLA-haploidentical T-cell depleted marrow **transplantation** for other severe immunodeficiencies was less **successful**. This was mainly due to failure of engraftment, despite intensive conditioning of the recipient, and to infectious complications e.g. by reactivation of latently present viruses.

L18 ANSWER 17 OF 21 MEDLINE on STN
ACCESSION NUMBER: 88127912 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3324405
TITLE: Fetal tissue transplantation, bone marrow transplantation and prospective gene therapy in severe immunodeficiencies

and enzyme deficiencies.
AUTHOR: Touraine J L; Roncarolo M G; Royo C; Touraine F
CORPORATE SOURCE: Transplantation and Immunobiology Unit, Hopital Edouard Herriot, Lyon, France.
SOURCE: Thymus, (1987) 10 (1-2) 75-87.
Journal code: 8009032. ISSN: 0165-6090.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198803
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880304

AB The **successful** development of **fetal tissue transplantation** has resulted in therapeutical solutions for patients with a variety of diseases. Fetal liver **transplants** as well as bone marrow **transplants**, can completely cure patients with severe combined immunodeficiency disease. These **transplants** can also be applied to treat other types of immunodeficiency, hemopathies, and inborn errors of metabolism, in association with immunosuppressive therapy. Despite complete HLA incompatibility between **transplanted** stem cells and host cells, functional activities of **donor**-derived T-lymphocytes are not restricted. In severe forms of Di George syndrome, immunological reconstitution can be obtained by fetal thymus **transplantation**. It is expected that, in the near future, pure stem cell **transplants** and gene **transplants** will develop and will provide remarkable solutions for the therapy of a large number of diseases.

L18 ANSWER 18 OF 21 MEDLINE on STN
ACCESSION NUMBER: 87063073 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2878238
TITLE: Organ procurement for children: the anencephalic fetus as donor.
AUTHOR: Harrison M R
SOURCE: Lancet, (1986 Dec 13) 2 (8520) 1383-6.
Journal code: 2985213R. ISSN: 0140-6736.
Report No.: KIE-23912.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Bioethics; Priority Journals
ENTRY MONTH: 198701
ENTRY DATE: Entered STN: 19900302
Last Updated on STN: 20030318
Entered Medline: 19870116

AB A member of a medical center fetal treatment program and division of pediatric surgery discusses the technical feasibility and unique suitability of **fetal tissue** and organ **transplants** for treatment of diseases and congenital defects in children. He argues that anencephalic fetuses would be ideal **donors**. Although some maintain that the anencephalic newborn is incapable of achieving personhood because it lacks the forebrain necessary for characteristic human activity, Harrison rejects using this claim because of the controversy concerning personhood, the potential for lack of respect for the fetus and its parents, and the possibility that less severely handicapped fetuses might be denied personhood. He proposes that the anencephalic fetus be considered a dying person because of clearly definable brain absence, and that **such** a fetus be recognized as brain dead for medicolegal purposes. The family could then be approached concerning donation.

L18 ANSWER 19 OF 21 MEDLINE on STN
ACCESSION NUMBER: 84137223 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6366090
TITLE: HLA antigens in choriocarcinoma.
AUTHOR: Sasagawa M; Suzuki T; Kajino T; Ohno M; Kanazawa K; Takeuchi S
SOURCE: Nippon Sanka Fujinka Gakkai zasshi, (1984 Jan) 36 (1) 81-4.

Journal code: 7505749. ISSN: 0300-9165.
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Japanese
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198403
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 19900319
Entered Medline: 19840326

AB Choriocarcinoma can be regarded as **transplanted** cancer, because its origin is in trophoblast which is **fetal tissue**. It is of interest whether HLA antigens are expressed on choriocarcinoma cells or not, since HLA antigens may play an important role if the patient's body could recognize choriocarcinoma as "not self" and initiate its immune response. In this report choriocarcinoma tissue in the uterus, obtained after hysterectomy, is stained by an indirect immunofluorescence technique using monoclonal antibodies to HLA-A,B,C and HLA-DR. We believe this is the first immunohistological study in which choriocarcinoma in **utero** is available for study and monoclonal antibodies to HLA antigens are applied. In the staining of HLA-A,B,C, and of HLA-DR, host cells, **such** as myometrial cells, show positive staining but choriocarcinoma cells show negative staining. It is thought that choriocarcinoma cells are viable and show negative staining of HLA antigens, on the basis of finding following HE staining and hCG staining using anti-hCG antibody and the clinical remarks of the patient **such** as her high urinary hCG titer before operation and no history of chemotherapy. These results agree with those of previous studies about HLA antigens on choriocarcinoma cell lines.

L18 ANSWER 20 OF 21 MEDLINE on STN
ACCESSION NUMBER: 83216183 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6854669
TITLE: Growth, differentiation, and viability of fetal rat cortical and spinal cord implants into adult rat spinal cord.
AUTHOR: Patel U; Bernstein J J
SOURCE: Journal of neuroscience research, (1983) 9 (3) 303-10. Journal code: 7600111. ISSN: 0360-4012.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198307
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 19900319
Entered Medline: 19830729

AB **Successful transplantation** of the fetal brain into adult host brain has been accomplished. These studies explore the growth, differentiation, and viability of E11, E12, and E15 rat fetal cortex and fetal spinal cord implantation into the spinal cord of adult rats (**donor** and host, Sprague-Dawley). Under deep Chloropent anesthesia, 70 rats had 1-mm cubes of fetal cortex inserted with pressure or by stylus injection subpially between the dorsal horn and dorsal column (left side), or implantation of whole segments of fetal spinal cord. Animals were prepared for light microscopy 14 and 21 days and 1, 2, and 3 months later. Implants by both **fetal tissues** had a 69% survival rate. The younger the fetal implant the higher the **success** of the implant (E11 greater than E15). The diameter of fetal spinal cord implants reached the diameter of control postnatal animals after 30 days. The implants not only increased in mass (up to 7-fold in some cases) but differentiated and matured (apolar, unipolar, bipolar, and multipolar) neurons were observed one to three months postimplantation. By 30 days postimplantation, fetal neurons had large, often crenated nuclei, with a large single prominent nucleolus. The most **successful** implants were the young E11 fetal spinal cord into the adult host spinal cord. These implants represent an initial **successful transplantation** of fetal spinal cord into adult spinal cord.

L18 ANSWER 21 OF 21 MEDLINE on STN
ACCESSION NUMBER: 82130188 MEDLINE

DOCUMENT NUMBER: PubMed ID: 7036455
TITLE: Sex-associated differences in the immune response against fetal major histocompatibility antigens.
AUTHOR: Tartakovsky B; De Baetselier P; Feldman M; Segal S
SOURCE: Transplantation, (1981 Nov) 32 (5) 395-7.
Journal code: 0132144. ISSN: 0041-1337.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198204
ENTRY DATE: Entered STN: 19900317
Last Updated on STN: 19900317
Entered Medline: 19820420

AB Alloantibodies against H-2b and H-2k haplotypes were produced in C57BL/6J and C3H female and male mice in response to **transplantation** of F1 **fetal tissue** (bone) or adult F1 cells (spleen). Testing IgG1 and IgG2 antibodies by means of the fluorescence-activated cell sorter (FACS II), we found no differences between males and females in the isotype content of antisera produced against spleen cells from adult **donors**. In contrast, striking sex-associated differences were found in the isotypes produced against fetal allografts: females produced much more IgG1 than males, although they produced comparable amounts of IgG2. Hence, it appears that females differ from males in their humoral alloreactivity against major histocompatibility complex (MHC) gene products expressed on fetal cells. **Such** MHC antigens expressed on **fetal tissues** seem to generate different immune signals than the MHC antigens expressed on adult cells. These observations might be of relevance to the biological role played by the IgG1 alloantibodies produced during pregnancy against the MHC alloantigens of the fetus.

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(FILE 'HOME' ENTERED AT 15:34:54 ON 20 JUL 2004)

FILE 'MEDLINE' ENTERED AT 15:35:04 ON 20 JUL 2004

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L1          6659 S FETAL TISSUE
L2        146532 S IN UTERO OR DONOR
L3         59250 S PERCUTAN?
L4             2 S L1 (S) L2 (S) 3
L5             0 S L1 (S) L2 (S) L3
L6            60 S L1 (S) L2
L7         23472 S INCISION
L8             0 S L1 (S) L2  (S) L7
L9        354581 S TRANSPLANT?
L10           14 S L1 (S) L2  (S) L9
L11      1197155 S SUCTION OR VACUUM OR SUC?
L12            1 S L1 (S) L2  (S) L9 (S) L11
L13      1406689 S SUCTION OR VACUUM OR SUC? OR REMOV?
L14            1 S L1 (S) L2  (S) L9 (S) L13
L15       247721 S ?CUTAN?
L16            0 S L1 (S) L2  (S) L9 (S) L15
L17            0 S L1 (L) L2  (L) L9 (L) L15
L18           21 S L1 (L) L2  (L) L9 (L) L13
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=> s l1 (l) l15
L19           64 L1 (L) L15

=> s l1 (l) l15 (l) l19
L20           64 L1 (L) L15 (L) L19

=> s l1 (l) l15 (l) l19 (l) l13
L21           13 L1 (L) L15 (L) L19 (L) L13

=> d 1-13 ibib abs

L21  ANSWER 1 OF 13      MEDLINE on STN
ACCESSION NUMBER:    2004087750      IN-PROCESS
DOCUMENT NUMBER:     PubMed ID: 14977357
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TITLE: Low iron diet and parenteral cadmium exposure in pregnant rats: the effects on trace elements and fetal viability.
AUTHOR: Piasek Martina; Blanusa Maja; Kostial Krista; Laskey John W
CORPORATE SOURCE: Mineral Metabolism Unit, Institute for Medical Research and Occupational Health, P.O. Box 291, HR-10001 Zagreb, Republic of Croatia.. mpiasek@imi.hr
SOURCE: Biometals : an international journal on the role of metal ions in biology, biochemistry, and medicine, (2004 Feb) 17 (1) 1-14.
Journal code: 9208478. ISSN: 0966-0844.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20040224
Last Updated on STN: 20040224

AB The effects of latent iron deficiency combined with parenteral subchronic or acute cadmium exposure during pregnancy on maternal and **fetal tissue** distribution of cadmium, iron and zinc, and on fetal viability were evaluated. Timed-pregnant Sprague-Dawley rats were fed on semisynthetic test diets with either high iron (240 mg kg) or low iron (10 mg kg), and concomitantly exposed to 0, 3 or 5 mg cadmium (as anhydrous CdCl2) per kilogram body weight. Animals were exposed to cadmium from gestation day 1 through 19 by **subcutaneously** implanted mini pumps (Subchronic exposure) or on gestation day 15 by a single **subcutaneous** injection (Acute exposure). All rats were killed on gestation day 19. Blood samples, selected organs and fetuses were **removed** and prepared for element analyses by atomic absorption spectrometry. Low iron diet caused decreases in maternal body weight, maternal and fetal liver weights, placental weights and tissue iron concentrations. By cadmium exposure, both subchronic and acute, tissue cadmium concentrations were increased and the increase was dose-related, maternal liver and kidney zinc concentrations were increased, and fetal zinc concentration was decreased. Cadmium concentration in maternal liver was additionally increased by low iron diet. Acute cadmium exposure caused lower maternal body and organ weights, high fetal mortality, and decreased fetal weights of survivors. In conclusion, parenteral cadmium exposure during pregnancy causes perturbations in essential elements in maternal and fetal compartments. Acute cadmium exposure in the last trimester of gestation poses a risk for fetal viability especially when combined with low iron in maternal diet.

L21 ANSWER 2 OF 13 MEDLINE on STN
ACCESSION NUMBER: 2003121718 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12635741
TITLE: Can human fetal cortical brain tissue transplant (up to 20 weeks) sustain its metabolic and oxygen requirements in a heterotopic site outside the brain? A study of 12 volunteers with Parkinson's disease.
AUTHOR: Bhattacharya N; Chhetri M K; Mukherjee K L; Ghosh A Baran; Samanta B Krishna; Mitra R; Bhattacharya M; Bhattacharya S; Bandopadhyaya T
CORPORATE SOURCE: Bijoygarh State Hospital, Calcutta, India.
SOURCE: Clinical and experimental obstetrics & gynecology, (2002) 29 (4) 259-66.
Journal code: 7802110. ISSN: 0390-6663.
PUB. COUNTRY: Italy
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200305
ENTRY DATE: Entered STN: 20030316
Last Updated on STN: 20030507
Entered Medline: 20030506

AB BACKGROUND: Neural and stem cell transplantation is emerging as a potential treatment for neurodegenerative diseases from Parkinson's to Huntington's disease. Stereotactic placement of dopaminergic neurons in the caudate-putamen (striatum), is being attempted in centers of excellence and has proved to be beneficial. Basic research using cell transplantation indicates that structural development mechanisms seen in immature brains, i.e., fetal brains, can also function in the adult brain.

The adult brain consumes 15% of the resting cardiac output for its metabolic needs. While most human tissues can sustain an anaerobic assault for a few minutes up to 30 minutes, a sudden total lack of oxygen supply to the brain cells in an adult will render the person unconscious within five to ten seconds. Our team has been working on the problem of human **fetal tissue** response to antigenic assault for the last two decades. In the present series, 12 patients with prolonged histories of Parkinsonism, who were not responding to anti-Parkinsonian drugs, and could not afford costly stereotactic surgery or deep brain stimulation and other modalities of recent Parkinson's disease treatment, were enrolled in the study. MATERIALS AND METHOD: After obtaining proper informed consents from the patients or their guardians and from the multidisciplinary ethical committee, the patients, varying in age from 45 to 75 years and suffering for many years with Parkinsonism, were enrolled in the heterotopic brain tissue transplant programme. We followed standard antiseptic, aseptic and premedication protocols, after selecting a proposed site of transplantation of the brain in the axillary fold of the skin, under local infiltration anaesthesia. In an adjacent OR, a fetus was collected from a consenting patient undergoing hysterotomy and ligation (before 20 weeks), under general anaesthesia. Within a minute of hysterotomy, the fetal brain tissue was dissected, and under the guidance of the operative microscope, 1 g of fetal cortical brain tissue was dissected and weighed in an electronic machine. The tissue was collected from around 1 cm of the frontal opercula of the developing human fetal brain and grafted in the already dissected and prepared **subcutaneous** site in the axilla and the skin was closed. Hematological parameters (Hgb; total count, Tc; differential count, Dc; erythocyte sedimentation rate, ESR) were estimated sequentially up to one month. A small portion of the transplanted tissue was retrieved after one to two months, and a serial histological study was done along with a clinical assessment of the disease condition as per the specifications of the Unified Parkinson's Disease Rating Scale. The results were matched with the pre-transplant ratings of the individual cases. Presenting dyskinesia was also rated (0-4), on the basis of objective criteria assessment like walking, putting on a coat, lifting a cup to drink, etc. RESULTS AND ANALYSIS: Initially 30 patients suffering from advanced Parkinson's disease (PD) were approached after getting the necessary clearance from the institutional multidisciplinary ethical committee; however, we have been able to arrange transplantation in only 12 cases so far. These patients were evaluated at the pre- and one month post-transplant period by the Unified Parkinson's Disease Rating Scale (0-108) and the minimum score was 40 in the motor portion of the unified scale at the pre-transplant state. Evaluation of the patients after one month revealed mild improvement of the pre-transplant scoring (up to 33.3%) in 41.6% of the cases, and moderate improvement (up to 66.6%) in another 41.6% of the cases. While 16.8% of the cases did not show any improvement from the basal score, i.e., the pre-transplant score, there was a definite sense of well being and rise in weight (2-4 pounds) noted in each case and there was also a reduction of the L-Dopa dosage in 75% of the cases. There was also a 58.3% improvement in the bradykinesia scoring from the pre-transplant level. What is intriguing is the survival, growth and proliferation of the grafted fetal brain tissue in the HLA- and sex-randomized adult axilla without any immunosuppressive support. Not a single histological study of the fetal brain tissues after **removal** from the axilla showed any signs of graft vs. host or inflammatory reaction (Figures 1-9) but there were features of growth of the transplanted cortical brain tissue along with its different components like neurogenesis, gliogenesis, early neovascularisation and angiogenesis, etc. There was also no systemic leucocytosis or lymphocytosis. DISCUSSION AND CONCLUSION: Histological evidence at the transplanted tissue site suggests that fetal cortical brain tissue can sustain life in sex-randomized, HLA-randomized adult hosts, without the support of immuno-suppressive drugs and the tacit support of the blood-CSF and blood-brain barrier and other specific requirements of adult brain cells in the skull. Whether the clinical improvement in PD is transient or long lasting is presently under investigation along with basic questions like, is it due to transplanted fetal dopaminergic or non-dopaminergic neurons or is it the growth factors and the cytokine mediated hitherto unknown reactions causing the clinical improvement.

L21 ANSWER 3 OF 13 MEDLINE on STN

ACCESSION NUMBER: 2003012687 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12519043
TITLE: Human fetal adrenal transplant: a possible role in relieving intractable pain in advanced rheumatoid arthritis.
AUTHOR: Bhattacharya N; Chhetri M K; Mukherjee K L; Das S Prasad; Mukherjee A; Bhattacharya M; Bhattacharya S
CORPORATE SOURCE: Bijoygarh State Hospital, Calcutta, India.
SOURCE: Clinical and experimental obstetrics & gynecology, (2002) 29 (3) 197-206.
Journal code: 7802110. ISSN: 0390-6663.
PUB. COUNTRY: Italy
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200304
ENTRY DATE: Entered STN: 20030110
Last Updated on STN: 20030404
Entered Medline: 20030403

AB BACKGROUND: The art of transplant surgery has gone a long way in establishing itself as an important discipline in medicine with the support of molecular biology, immunology, biochemistry, etc., as the ultimate treatment for the restoration of function of a failing organ. With the progressive increase in the life expectancy of human beings, there is an increasing discrepancy in the demand and supply of organ grafts. A less efficient alternative could be synthetic or mechanical grafts. Nucleated cell therapy, that is, cellular transplant, is a promising new area of study with its proven efficacy in neuro-degenerative disorders, hematopoietic disorders, diabetes and trauma-induced tissue loss, to name a few. Human fetal cell/tissue with its intrinsic hypo-antigenic advantage (up to 20 weeks of study), could be an interesting area of cellular/tissue transplant. Our research group has earlier reported on the safe use of umbilical cord whole blood and the **successful** transplant of a human fetal lung, heart, pancreas, liver, thymus, in an artificially prepared vascular **subcutaneous** axillary fold in which there was no feature of hyper-acute, acute or chronic rejection of the graft in HLA- and sex-randomized adult recipients, without concomitant immunosuppressives or radiation of the host to potentiate the survival of the fetal graft (within 20 weeks of gestation) within the lowest observation period of one month. The present study was aimed at examining the role of developing fetal adrenal transplants for patients with rheumatoid arthritis and severe pain due to involvement of inflammatory and neuropathic components. MATERIALS AND METHOD: Ten cases were enrolled in the present study after thorough informed consent and approval by the ethical committee of the institute. The age of the patients varied from 50 to 76 years and the group was comprised of three males and seven females. The age of the adrenal grafts varied from 16 to 20 weeks and these were collected from mothers admitted for hysterotomy and ligation. These long-standing rheumatoid patients (suffering for five to 15 years), presented with at least four of the seven 1987 revised criteria of the American College of Rheumatology for diagnosis of rheumatoid arthritis. A 2.5 cm long and 2 cm deep tissue space was dissected and prepared in each transplant recipient at the axilla using diathermy and knife after infiltrating the site with one percent lignocaine solution. The tissue collected from the consenting mother undergoing hysterotomy and ligation was inserted into this site, and the site was closed with 00 atraumatic vicryl. All necessary pre- and postoperative surgical precautions were taken to prevent infections. Sequential total count and differential count of leucocytes were undertaken to analyze the impact of the transplant on the host. After one month, a part of the transplanted **fetal tissue** was recovered for histological staining to examine whether there was any graft versus host reaction. RESULTS AND ANALYSIS: All ten patients tolerated the transplant procedure well. There was no fever, intractable pain or any other specific serious side-effect which could justify the **removal** of the transplant before one month. There was no discharge from the incision site and the healing of the scar was by and large normal. There was no unusual leucocytosis, lymphocytosis and the retrieved graft tissue did not suggest transplant rejection. However, there was definite pain relief, reduction in swelling and improvement of mobility of varying degree in a majority of the patients which was

perceivable from the 15th day onwards. There was also a sense of well being (in 80%) and a gain in weight of three pounds or more (in 70%) among the fetal transplant recipients. DISCUSSION AND CONCLUSION: To understand the underlying mechanism, in case of pregnancy immunotolerance, we are of the opinion that emphasis should be placed on the role of non-specific and non-cytopathic blocking antibodies produced during pregnancy. The hypo-antigenicity of the developing human fetal system may possibly contribute to the production of this blocking antibody during pregnancy, and thus may play a role in the lack of recognition by the host's HLA system. This behaviour of the developing human **fetal tissue** provides some advantages over adult tissue for fetal cell/tissue transplantation purposes. The relief of pain, inflammation and restoration of mobility may be due to the effect of the transplanted adrenal graft, with the medullary component contributing to endorphin-like substance liberation and the cortical component contributing to glucocorticoid synthesis.

L21 ANSWER 4 OF 13 MEDLINE on STN
ACCESSION NUMBER: 2002107433 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11838747
TITLE: Fetal tissue/organ transplant in HLA-randomized adult vascular subcutaneous axillary folds: preliminary report of 14 patients.
AUTHOR: Bhattacharya N
CORPORATE SOURCE: Principal Investigator of the Project on Fetal Tissue Transplant in Adult Health and Disease, and Surgeon-Superintendent, Bijovygarh State Hospital, Calcutta, India.
SOURCE: Clinical and experimental obstetrics & gynecology, (2001) 28 (4) 233-9.
Journal code: 7802110. ISSN: 0390-6663.
PUB. COUNTRY: Italy
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200207
ENTRY DATE: Entered STN: 20020213
Last Updated on STN: 20020731
Entered Medline: 20020730

AB BACKGROUND: In the year 1902, the first **successful** experimental organ transplant, i.e., an autotransplant of a dog's kidney from its normal position to the vessels of the neck, which resulted in some urine flow, was performed in the Vienna Physiology Institute under the direction of Hofrath Exner by Dr. Emerich Ullman (1861-1937). Since then, the art of transplant surgery has come a long way in establishing itself as an important discipline with the support disciplines of immunology, molecular biology, etc., for the restoration of a failing organ. Today there is a major discrepancy in the demand and supply of organ grafts. The aim of the present study is to see whether fetal organ and tissue, with its intrinsic advantages of hypo-antigenicity, can survive in a HLA and sex-randomized host in a surgically prepared vascular **subcutaneous** axillary fold, without any immunosuppressive support. We have earlier reported two cases of fetal thymic transplant, collected from consenting mothers undergoing hysterotomy and ligation. MATERIALS AND METHODS: Fourteen cases were recruited for the present study after thorough informed consent and approval by the Ethical Committee of the Project. Of these, five patients were suffering from advanced cancer, three from diabetic gangrene, three from ischaemic heart disease and three from rheumatoid arthritis, liver abscess and disc prolapse. The ages of the patients varied from 39 to 82 years. Six fetal thymuses, three fetal liver tissues, three fetal cardiac tissues, one fetal pancreas and one fetal lung tissue were transplanted. All the fetuses were dissected and the selected tissues/organs were transplanted within one to three minutes after collecting them from the consenting mothers undergoing hysterotomy and ligation. The **fetal tissue** graft was placed in a surgically prepared **subcutaneous** vascular axillary fold, 2x1 cm, under local anaesthesia in the consenting adult recipient. Sequential Hb, Tc, Dc, ESR were done to see the impact of the transplant on the host system. After one month, the transplanted **fetal tissue** was taken out by an elliptical incision and the tissue was processed for histological staining. RESULTS AND ANALYSIS: All the 14 patients

tolerated the transplant procedure well. There was no fever, intractable pain or any other specific serious side-effect justifying **removal** of the transplant earlier. There was no discharge from the incision site and the healing and scar were by and large normal. There was no unusual leucocytosis or lymphocytosis. The serial histological study did not suggest features of transplant rejection. DISCUSSION AND CONCLUSION: Pregnancy and neoplasm are two outstanding examples of natural tolerance to homograft. In both cases, blocking antibody has an important role in the phenomenon of immunotolerance. From our experiments mentioned above transplantation and our earlier reported studies, we believe that the hypo-antigenic **fetal tissue** has distinct advantages over adult tissue for transplant purposes.

L21 ANSWER 5 OF 13 MEDLINE on STN
ACCESSION NUMBER: 2001643702 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11695808
TITLE: A unique experience with human pre-immune (12 weeks) and hypo-immune (16 weeks) fetal thymus transplant in a vascular subcutaneous axillary fold in patients with advanced cancer: a report of two cases.
AUTHOR: Bhattacharya N; Mukherjee K L; Chettri M K; Banerjee T; Bhattacharya S; Ghosh A; Bhattacharya M
CORPORATE SOURCE: Principal Investigator of the Project and Surgeon Superintendent, Bijoygarh State Hospital, Calcutta, India.
SOURCE: European journal of gynaecological oncology, (2001) 22 (4) 273-7.
Journal code: 8100357. ISSN: 0392-2936.
PUB. COUNTRY: Italy
DOCUMENT TYPE: (CASE REPORTS)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200202
ENTRY DATE: Entered STN: 20011107
Last Updated on STN: 20020301
Entered Medline: 20020228

AB BACKGROUND: The **successful** development of fetal cell/tissue transplantation in adults has resulted in the possibility of eventual therapeutic solutions with a variety of intractable diseases. Umbilical cord whole blood transplantation appears to be safe in the adult system. In severe forms of DiGeorge Syndrome, cultured thymus transplant can help in the reconstitution of the immune condition of the host. **Successful fetal tissue** transplant in adults has raised the hope of future effective gene transplant and its manipulation prospects to combat many diseases including hemopathies, inborn errors of metabolism, immunodeficiencies and even cancer and AIDS. MATERIALS AND METHOD: Two cases of advanced cancer were treated with fetal (pre-immune 12 weeks and hypo-immune 16 weeks) thymus transplants in **subcutaneous** vascular axillary folds, which were **removed** after one month. Thymuses were collected from consenting mothers undergoing hysterotomy and ligation. RESULTS AND ANALYSIS: Patient I was suffering from non-Hodgkins lymphoma (Ann Arbor Stage IV) and was receiving cyclophosphomide, doxorubicin, vincristine and prednisolone after a course of radiotherapy; she developed leucopenia (2.400/cmm), which improved after receiving a 16-week human fetal thymic graft. The leucopenia was eventually over-corrected and the leucocyte count reached 44,000/cmm within a month, which was reversed after the thymus was taken out. Histology of the excised thymic graft showed growth and proliferation without any graft vs. host (GVH) reaction. Patient 2 was suffering from breast duct carcinoma (T4, N2, M0,) with estrogen, progesterone, and epidermal growth factor negative status, and was treated with modified radical mastectomy and axillary clearance followed by chemotherapy with cyclophosphomide, methotrexate and 5-fluorouracil for six cycles. She also received a 12-week-old human fetal thymus at the contra-lateral axilla which was **removed** after one month. In this case the peripheral leucocyte count did not show appreciable variation as in the first case. However, histology of the excised thymic graft showed growth and proliferation with an appearance of Hassel's corpuscles. CONCLUSION: Pre-immune and hypo-immune human fetal thymic transplant is not rejected in patients suffering from advanced cancer within one month (observation period). Thymic lymphocyte shedding in the

correction of leucopenia in the background of non-Hodgkin's lymphoma may have many therapeutic implications.

L21 ANSWER 6 OF 13 MEDLINE on STN
ACCESSION NUMBER: 1998382272 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9718146
TITLE: Tissue repair in the fetal intestinal tract occurs with adhesions, fibrosis, and neovascularization.
AUTHOR: Mast B A; Albanese C T; Kapadia S
CORPORATE SOURCE: Division of Plastic and Reconstructive Surgery, University of Florida, Gainesville 32606, USA.
SOURCE: Annals of plastic surgery, (1998 Aug) 41 (2) 140-4; discussion 144-7.
Journal code: 7805336. ISSN: 0148-7043.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199810
ENTRY DATE: Entered STN: 19981029
Last Updated on STN: 19981029
Entered Medline: 19981021

AB **Cutaneous** wound healing in the fetus can occur in a nonfibrotic, regenerative manner. However, other **fetal tissues** **such** as bone and stomach heal with scar formation. In light of potential ramifications for adult hollow visceral scarring (biliary and intestinal strictures), this study was undertaken to determine if tubular visceral tissue repair in the fetus is regenerative or fibrotic. Fetal rabbits underwent laparotomy on day 24 of gestation, during which a controlled intestinal enterotomy was created and suture repaired immediately using microsurgical techniques. Maternal rabbits and adult male rabbits also underwent enterotomy and repair. After 5 days all animals were sacrificed and the wounds analyzed histologically by a pathologist in a blinded fashion. All animals demonstrated a similar degree of peri-intestinal adhesion formation. Fetal and maternal wounds contained fibroblastic and smooth muscle cell proliferation, mild inflammatory infiltration, and new blood vessel formation. The male adult wounds demonstrated a more pronounced fibrovascular healing response. Immunohistochemical staining for CD31 (endothelial cell marker) was quantitated on a scale of 0 to 4+, indicating degree of neovascularization. The mean scores for the fetal and maternal groups were similar (1.70 +/- 0.68 and 1.23 +/- 1.07 respectively), but were significantly greater for male adults (2.93 +/- 0.12; p = 0.001 by analysis of variance). The results of this study indicate that hollow visceral tissue repair in the fetal rabbit intestine occurs in a similar fibrotic manner as adult healing. This provides further evidence that regenerative healing in the fetus is not ubiquitous. Differences in the degrees of fibrosis and neovascularization between adult male and pregnant female wounds deserve further investigation.

L21 ANSWER 7 OF 13 MEDLINE on STN
ACCESSION NUMBER: 96183561 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8618017
TITLE: Detection of telomerase activity in malignant and nonmalignant skin conditions.
AUTHOR: Taylor R S; Ramirez R D; Ogoshi M; Chaffins M; Piatyszek M A; Shay J W
CORPORATE SOURCE: University of Texas Southwestern Medical Center at Dallas 75235, USA.
CONTRACT NUMBER: AG07992 (NIA)
SOURCE: Journal of investigative dermatology, (1996 Apr) 106 (4) 759-65.
Journal code: 0426720. ISSN: 0022-202X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199606
ENTRY DATE: Entered STN: 19960620
Last Updated on STN: 19960620
Entered Medline: 19960613

AB Telomeres are the end regions of linear chromosomes, and in normal somatic cells the lengths of telomeres shorten with **successive** cell divisions. Telomerase, a ribonucleoprotein enzyme, maintains the length of telomeres in immortal and germline cells. Although present in human **fetal tissues**, shortly after birth telomerase activity is not detectable except in germline cells, hematopoietic cells, and most human primary tumors. In the present study we show telomerase activity to be present in 73 of 77 basal cell carcinomas, 15 of 18 nonmetastatic **cutaneous** squamous cell carcinomas, and 6 of 7 **cutaneous** melanomas, contrasting with extremely low levels detected in sun-protected skin. Sun-damaged skin, psoriatic lesional skin, and skin from lesions of poison ivy dermatitis, however, have increased levels of telomerase activity compared to sun-protected skin, although less than that detected in tumor tissue. Because telomerase activity can be found in inflammatory lesions of the skin, this indicates that telomerase activity does not always correlate with the malignant phenotype. In addition, we show that telomerase activity is localized to the epidermis of newborn foreskin, which suggests that telomerase is expressed constitutively by cells in the epidermis. Finding higher levels of telomerase activity in sun-exposed skin compared to nonexposed skin suggests that environmental factors may modulate telomerase activity.

L21 ANSWER 8 OF 13 MEDLINE on STN
ACCESSION NUMBER: 94190591 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8142111
TITLE: Evaluation of the teratogenic risk of cutaneously administered retinoids.
AUTHOR: Buchan P
CORPORATE SOURCE: CIRD Galderma, Sophia Antipolis, France.
SOURCE: Skin pharmacology : official journal of the Skin Pharmacology Society, (1993) 6 Suppl 1 45-52. Ref: 22
Journal code: 8810069. ISSN: 1011-0283.
PUB. COUNTRY: Switzerland
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199405
ENTRY DATE: Entered STN: 19940511
Last Updated on STN: 19940511
Entered Medline: 19940504

AB In current **cutaneous** retinoid therapy systemic exposure is low and the risk of teratogenesis appears to be limited. However, new indications, altered posologies and the introduction of new synthetic retinoids demand continuous assessment of the teratogenic risk. Teratogenicity testing of new substances in animals is only of value if accompanied by detailed pharmacokinetic analysis to establish the relationships between the levels of parent compound and metabolite in both maternal plasma and **fetal tissues** and teratogenic events. This information should be compared to the maximum of relevant pharmacokinetic data which can be ethically obtained in man or from human tissues. The presence or absence of teratogenic effects following **cutaneous** administration of retinoids in animals has, as **such**, little direct bearing on the risk in man. Two special cases exist where teratogenic risk can be evaluated directly in man without reference to animal studies. The first concerns substances whose teratogenic potential has been established in man by other routes of administration permitting a comparison with the **cutaneous** route on a pharmacokinetic basis. The second concerns the **cutaneous** administration of endogenously occurring substances and their eventual disturbance of systemic retinoid equilibrium.

L21 ANSWER 9 OF 13 MEDLINE on STN
ACCESSION NUMBER: 92165012 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1537521
TITLE: Use of an animal model for the study of the role of human immunodeficiency virus 1 in the human intestine.
COMMENT: Erratum in: Gastroenterology 1992 Sep;103(3):1123
AUTHOR: Winter H S; Fox C H; Hendren R B; Isselbacher K J; Folkman J; Letvin N L

CORPORATE SOURCE: Department of Pediatrics, Children's Hospital, Boston, Massachusetts.
CONTRACT NUMBER: AI27747 (NIAID)
SOURCE: Gastroenterology, (1992 Mar) 102 (3) 834-9.
Journal code: 0374630. ISSN: 0016-5085.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; AIDS
ENTRY MONTH: 199204
ENTRY DATE: Entered STN: 19920417
Last Updated on STN: 19970203
Entered Medline: 19920402

AB The gastrointestinal manifestations of human immunodeficiency virus (HIV)-1 disease have centered on identifiable causes of intestinal dysfunction **such** as parasitic and bacterial pathogens. The lamina propria of the intestine contains cell that harbor HIV-1, but the significance of this observation remains unknown. Because limited animal models are available to evaluate the gastrointestinal effects of this infection, a system that uses human fetal intestine transplanted **subcutaneously** onto the back of an immunodeficient mouse was developed. After 8 weeks, **fetal tissues** mature into an adult-appearing tissue with a lumen. Cell-free HIV-1 was inoculated into the explants, an evidence for infection was evaluated by histological evaluation, in situ hybridization, and polymerase chain reaction. No evidence for HIV-1 incorporation into epithelial cells could be found. It was concluded that this model provides a system in which intestinal HIV-1 interaction can be evaluated. In this model, cell-free HIV-1 does not appear to infect the epithelial cell.

L21 ANSWER 10 OF 13 MEDLINE on STN
ACCESSION NUMBER: 89192871 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3240093
TITLE: Cadmium and zinc concentrations in fetal and maternal rat tissue after parenteral administration of cadmium during pregnancy.
AUTHOR: Roelfzema W H; Roelofsen A M; Herber R F; Peereboom-Steg J H
CORPORATE SOURCE: Laboratory of Histology and Cell Biology, University of Amsterdam, The Netherland.
SOURCE: Archives of toxicology, (1988) 62 (4) 285-90.
Journal code: 0417615. ISSN: 0340-5761.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198905
ENTRY DATE: Entered STN: 19900306
Last Updated on STN: 19970203
Entered Medline: 19890505

AB Cadmium (Cd) and zinc (Zn) concentrations were determined by solid sampling atomic absorption spectrometry (AAS) in rat maternal and **fetal tissues** after exposure to cadmium. Cadmium was administered **subcutaneously** as CdCl2 in saline daily during pregnancy. Two experiments were performed. In experiment I we investigated the tissue concentration at day 19 (gestational age) after administration of several doses: 0, 1.1, 2.2, 4.4, and 8.8 mumol Cd/kg/day. In experiment II the course of the Cd and Zn concentrations during pregnancy was investigated by collecting samples at days 14, 16, 18 and 20, after daily injections of 4.4 mumol Cd/kg. Cadmium concentrations in blood, maternal liver, placenta and fetal liver increased with dose and duration of exposure. Cadmium was heavily accumulated in the liver and transferred to the fetus only in small amounts. The zinc concentration in the maternal liver was positively correlated with the cadmium concentration. In the placenta the zinc concentration was not affected. Zinc in fetal liver was decreased from day 18 onward. Despite relatively high cadmium levels and decreased zinc levels in the fetus, we observed no adverse effects on various reproduction parameters, **such** as birth weights and obvious malformations.

L21 ANSWER 11 OF 13 MEDLINE on STN

ACCESSION NUMBER: 89080956 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3204464
TITLE: Transforming growth factor beta (TGF-beta) induces fibrosis in a fetal wound model.
AUTHOR: Krummel T M; Michna B A; Thomas B L; Sporn M B; Nelson J M; Salzberg A M; Cohen I K; Diegelmann R F
CORPORATE SOURCE: Department of Surgery, Medical College of Virginia, Virginia Commonwealth University, Richmond 23298-0015.
CONTRACT NUMBER: 20298
SOURCE: Journal of pediatric surgery, (1988 Jul) 23 (7) 647-52. Journal code: 0052631. ISSN: 0022-3468.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198902
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19890209

AB The adult cellular response to tissue injury is characterized by acute inflammation followed eventually by fibroblast proliferation and collagen synthesis. **Fetal tissue** responses to injury differ markedly from those of the adult; an early acute inflammatory response is absent, few fibroblasts participate, and no collagen is deposited. The object of the present study was to analyze the effects of transforming growth factor beta (TGF-beta), an important regulatory molecule in adult healing events, on the **fetal tissue** response following wounding. Fetal cellular and extracellular matrix responses to injury were evaluated by placing **subcutaneous** wound implants containing TGF-beta (0.01 to 10 ng) in fetal rabbits at 24 days gestation (term = 31 days). Histologic responses one to seven days later were compared with fetal and adult control implants without TGF-beta. The histology of the adult implant was characterized by an early acute inflammatory response: by day 7 fibroblasts and collagen were predominant. In contrast, control implants **removed** from fetal rabbits had no histologic evidence of acute inflammation or fibroblast penetration and no collagen was deposited. When implants containing 1.0 ng TGF-beta were **removed** from fetal rabbits at seven days, a grossly fibrotic reaction was observed: histology confirmed marked fibroblast penetration with collagen deposition. Fetal implants containing 0.01 ng or 10 ng TGF-beta showed few fibroblasts but had increased numbers of inflammatory cells compared with controls. These observations demonstrate that the fetal response becomes adultlike with fibroblast proliferation and collagen accumulation when TGF-beta is added, thus documenting the responsiveness of the fetal system to adult repair signals.(ABSTRACT TRUNCATED AT 250 WORDS)

L21 ANSWER 12 OF 13 MEDLINE on STN
ACCESSION NUMBER: 87120767 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3544283
TITLE: Passively acquired autoimmunity and the maternal fetal dyad in systemic lupus erythematosus.
AUTHOR: Buyon J; Szer I
SOURCE: Springer seminars in immunopathology, (1986) 9 (2-3) 283-304. Ref: 83
Journal code: 7910384. ISSN: 0344-4325.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198703
ENTRY DATE: Entered STN: 19900303
Last Updated on STN: 19900303
Entered Medline: 19870316

AB Neonatal lupus syndromes consist of transient **cutaneous** and hematologic abnormalities and permanent cardiac disorders all of which result from a common pathogenetic mechanism, the passive transfer of maternal autoantibodies. Detrimental antibodies **such** as SSA/Ro and SSB/La gain access to the fetal circulation via the normal active transport system of the trophoblast tissue which is operative after 20 weeks gestation. Despite functional maturation of the cardiac conduction

system by 16 weeks gestation, fetal bradycardias are most often encountered after this time. Several lines of evidence are advanced in this review to support the role of myocarditis as the initial consequence of autoantibody attack on the fetal heart. The end result of this inflammatory insult is permanent fibrosis manifest as complete congenital heart block (CCHB). Despite the clearly demonstrated presence of SSA/Ro and SSB/La in **fetal tissues** as well as their fluctuation in quantity during the cell cycle, the precise accessibility of these antigens to their respective autoantibodies in unknown at the present time. However, ultraviolet light is reported to induce cell surface expression of SSA/Ro on cultured keratinocytes. The recognition of CCHB by fetal echocardiogram is presented. The rationale for the use of dexamethasone which crosses the placenta in an active form to treat fetal immune effector functions is discussed. Intense maternal plasmapheresis in an attempt to rapidly decrease maternal autoantibodies may provide another approach to the management of CCHB. Through increasing knowledge of this model of "passively acquired pure" systemic lupus erythematosus, insights into mechanisms of tissue injury and strategies for treatment will emerge.

L21 ANSWER 13 OF 13 MEDLINE on STN
ACCESSION NUMBER: 77088419 MEDLINE
DOCUMENT NUMBER: PubMed ID: 831927
TITLE: Fetal complications of amniography.
AUTHOR: Grech P; Spitz L
SOURCE: British journal of radiology, (1977 Feb) 50 (590) 110-2.
Journal code: 0373125. ISSN: 0007-1285.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: (CASE REPORTS)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 197703
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19970203
Entered Medline: 19770331

AB In a series of 241 amniograms, there were two cases of **fetal tissue** damage resulting from the **subcutaneous** injection of contrast material. Details of these two cases are given and the damage sustained illustrated. Measures designed to prevent **such** complications are outlined, together with recommendations for its management, should **such** a complication occur.

=> d his

(FILE 'HOME' ENTERED AT 15:34:54 ON 20 JUL 2004)

FILE 'MEDLINE' ENTERED AT 15:35:04 ON 20 JUL 2004

L1	6659	S	FETAL TISSUE
L2	146532	S	IN UTERO OR DONOR
L3	59250	S	PERCUTAN?
L4	2	S	L1 (S) L2 (S) 3
L5	0	S	L1 (S) L2 (S) L3
L6	60	S	L1 (S) L2
L7	23472	S	INCISION
L8	0	S	L1 (S) L2 (S) L7
L9	354581	S	TRANSPLANT?
L10	14	S	L1 (S) L2 (S) L9
L11	1197155	S	SUCTION OR VACUUM OR SUC?
L12	1	S	L1 (S) L2 (S) L9 (S) L11
L13	1406689	S	SUCTION OR VACUUM OR SUC? OR REMOV?
L14	1	S	L1 (S) L2 (S) L9 (S) L13
L15	247721	S	?CUTAN?
L16	0	S	L1 (S) L2 (S) L9 (S) L15
L17	0	S	L1 (L) L2 (L) L9 (L) L15
L18	21	S	L1 (L) L2 (L) L9 (L) L13
L19	64	S	L1 (L) L15
L20	64	S	L1 (L) L15 (L) L19
L21	13	S	L1 (L) L15 (L) L19 (L) L13

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=> s percutan?
L22      59250 PERCUTAN?

=> s l1 (S) l22
L23          0 L1 (S) L22

=> s l1 (l) l22
L24          2 L1 (L) L22

=> d 1-2 ibib abs

L24  ANSWER 1 OF 2     MEDLINE on STN
ACCESSION NUMBER:   1999387190     MEDLINE
DOCUMENT NUMBER:    PubMed ID: 10455432
TITLE:              Successful expression of beta-galactosidase and factor IX
                    transgenes in fetal and neonatal sheep after
                    ultrasound-guided percutaneous adenovirus vector
                    administration into the umbilical vein.
COMMENT:            Comment in: Gene Ther. 1999 Jul;6(7):1200-1. PubMed ID:
                    10455427
AUTHOR:             Themis M; Schneider H; Kiserud T; Cook T; Adebakin S;
                    Jezzard S; Forbes S; Hanson M; Pavirani A; Rodeck C;
                    Coutelle C
CORPORATE SOURCE:   Cystic Fibrosis Gene Therapy Research Group, Section of
                    Molecular Genetics, Division of Biomedical Sciences,
                    Imperial College School of Medicine, London, UK.
SOURCE:             Gene therapy, (1999 Jul) 6 (7) 1239-48.
                    Journal code: 9421525. ISSN: 0969-7128.
PUB. COUNTRY:       ENGLAND: United Kingdom
DOCUMENT TYPE:      Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
ENTRY MONTH:        200002
ENTRY DATE:         Entered STN: 20000309
                    Last Updated on STN: 20000320
                    Entered Medline: 20000224
AB   In utero somatic gene therapy in the later stages of pregnancy may allow
     targeting of organ systems which are difficult to reach later in life and
     to prevent the development of tissue damage otherwise caused by the early
     onset of inherited diseases. We report here on the percutaneous
     delivery of two adenoviral vectors, containing the beta-galactosidase
     reporter gene and the human Factor IX gene respectively, to the fetal
     liver and circulation by ultrasound-guided umbilical vein puncture similar
     to procedures used in human pregnancy. Vector spread, as detected by PCR
     analysis for the beta-galactosidase encoding vector, was found in almost
     all fetal and neonatal organs and in the maternal liver. Expression of
     the beta-galactosidase transgene was detected in many fetal
     tissues by RT-PCR. High beta-galactosidase production was shown
     by immuno-histochemistry predominantly in the liver, where about 30percent
     of the hepatocytes stained positive, and in the adrenal cortex.
     Production of factor IX was determined by ELISA in the plasma of treated
     fetuses and newborn lambs and reached at birth up to 80percent of the
     normal human plasma concentration. This demonstrates a very hopeful proof
     of principle for the development of prenatal treatment of many genetic
     diseases but also requires more detailed investigations with respect to
     the observed systemic spread of the vector.

L24  ANSWER 2 OF 2     MEDLINE on STN
ACCESSION NUMBER:   91051741     MEDLINE
DOCUMENT NUMBER:    PubMed ID: 2240113
TITLE:              Direct analysis of uncultured cytotrophoblastic cells from
                    second- and third-trimester placentas: an accurate and
                    rapid method for detection of fetal chromosome
                    abnormalities.
AUTHOR:             Shulman L P; Tharapel A T; Meyers C M; Phillips O P;
                    Simpson J L; Elias S
CORPORATE SOURCE:   Department of Obstetrics and Gynecology, University of
                    Tennesse, Memphis 38163.
CONTRACT NUMBER:    HD-22968 (NICHD)
     HD-82904 (NICHD)
SOURCE:             American journal of obstetrics and gynecology, (1990 Nov)
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163 (5 Pt 1) 1606-9.
Journal code: 0370476. ISSN: 0002-9378.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199012
ENTRY DATE: Entered STN: 19910208
Last Updated on STN: 20020125
Entered Medline: 19901214

AB Transabdominal chorionic villus sampling can be readily used for detection of fetal chromosome abnormalities in the second and third trimesters of pregnancy. Although culture of chorionic villi offers little advantage over cultured amniotic fluid cells with respect to time required to obtain results, cytogenetic analysis of chorionic villi by direct analysis of uncultured cytotrophoblastic cells offers clear advantages because of the very short time required to obtain results. To determine whether direct analysis of uncultured cytotrophoblastic cells from second- and third-trimester placentas can routinely provide rapid and accurate assessment of fetal status, we evaluated chorionic villus specimens obtained from 57 placentas; 49 placentas were sampled in the second trimester whereas eight were sampled in the third trimester. Direct preparations yielded karyotypes in 56 (98.2%) preparations; all results of direct analyses were available within 72 hours and, when requested, within 12 hours. All results were confirmed by chromosome analysis of cultured mesenchymal core cells or cultured **fetal tissue**. We conclude that direct analysis of cytotrophoblastic cells from second- and third-trimester placentas is a very rapid and accurate method for determining fetal chromosome status that is comparable with, if not superior to, **percutaneous** umbilical blood sampling.

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=> d his

     (FILE 'HOME' ENTERED AT 15:34:54 ON 20 JUL 2004)

     FILE 'MEDLINE' ENTERED AT 15:35:04 ON 20 JUL 2004
L1          6659 S FETAL TISSUE
L2        146532 S IN UTERO OR DONOR
L3         59250 S PERCUTAN?
L4             2 S L1 (S) L2 (S) 3
L5             0 S L1 (S) L2 (S) L3
L6            60 S L1 (S) L2
L7         23472 S INCISION
L8             0 S L1 (S) L2  (S) L7
L9        354581 S TRANSPLANT?
L10           14 S L1 (S) L2  (S) L9
L11      1197155 S SUCTION OR VACUUM OR SUC?
L12            1 S L1 (S) L2  (S) L9 (S) L11
L13      1406689 S SUCTION OR VACUUM OR SUC? OR REMOV?
L14            1 S L1 (S) L2  (S) L9 (S) L13
L15       247721 S ?CUTAN?
L16            0 S L1 (S) L2  (S) L9 (S) L15
L17            0 S L1 (L) L2  (L) L9 (L) L15
L18           21 S L1 (L) L2  (L) L9 (L) L13
L19           64 S L1 (L) L15
L20           64 S L1 (L) L15 (L) L19
L21           13 S L1 (L) L15 (L) L19 (L) L13
L22        59250 S PERCUTAN?
L23            0 S L1 (S) L22
L24            2 S L1 (L) L22

=> s l2 (S) l22
L25           79 L2 (S) L22

=> s fetal
          215418 FETAL
               6 FETALS
L26       215420 FETAL
                 (FETAL OR FETALS)
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=> s l2 (S) l22 (S) l26
L27          8 L2 (S) L22 (S) L26

=> d 1-2 ibib abs

L27  ANSWER 1 OF 8     MEDLINE on STN
ACCESSION NUMBER:   2003599387     MEDLINE
DOCUMENT NUMBER:    PubMed ID: 14681699
TITLE:              Widespread and efficient marker gene expression in the
                    airway epithelia of fetal sheep after minimally invasive
                    tracheal application of recombinant adenovirus in utero.
AUTHOR:             Peebles D; Gregory L G; David A; Themis M; Waddington S N;
                    Knapton H J; Miah M; Cook T; Lawrence L; Nivsarkar M;
                    Rodeck C; Coutelle C
CORPORATE SOURCE:   Department of Obstetrics and Gynaecology, Royal Free and
                    University College Medical School, London, UK.
SOURCE:             Gene therapy, (2004 Jan) 11 (1) 70-8.
                    Journal code: 9421525. ISSN: 0969-7128.
PUB. COUNTRY:       England: United Kingdom
DOCUMENT TYPE:      Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
ENTRY MONTH:        200404
ENTRY DATE:         Entered STN: 20031219
                    Last Updated on STN: 20040423
                    Entered Medline: 20040422
AB   Cystic fibrosis is a common lethal genetic disease caused by functional
     absence of the cystic fibrosis transmembrane conductance regulator (CFTR).
     Although a candidate disease for in utero gene therapy, demonstration of
     potentially therapeutic levels of transgene expression in the fetal
     airways after minimally invasive gene delivery is a mandatory prerequisite
     before application of this approach in humans can be considered.  We
     report here on the delivery of a beta-galactosidase expressing adenovirus
     directly to the airways of fetal sheep in utero using
     ultrasound-guided percutaneous injection of the trachea in the
     fetal chest.  Injection of adenoviral particles to the fetal
     airways was not associated with mortality and resulted in low-level
     expression in the peripheral airways.  However, complexation of the virus
     with DEAE dextran, which confers a positive charge to the virus, and
     pretreatment of the airways with Na-caprate, which opens tight junctions,
     increased transgene expression, and a combination of these two enhancers
     resulted in widespread and efficient gene transfer of the fetal trachea
     and bronchial tree.  Using a percutaneous ultrasound-guided injection
     technique, we have clearly demonstrated proof of principle for substantial
     transgene delivery to the fetal airways providing levels of gene
     expression that could be relevant for a therapeutic application of CFTR
     expressing vectors.

L27  ANSWER 2 OF 8     MEDLINE on STN
ACCESSION NUMBER:   2003144731     MEDLINE
DOCUMENT NUMBER:    PubMed ID: 12659676
TITLE:              Ultrasound-guided percutaneous delivery of
                    adenoviral vectors encoding the beta-galactosidase and
                    human factor IX genes to early gestation fetal
                    sheep in utero.
AUTHOR:             David Anna; Cook Terry; Waddington Simon; Peebles Donald;
                    Nivsarkar Megha; Knapton Holly; Miah Maznu; Dahse Thomas;
                    Noakes David; Schneider Holm; Rodeck Charles; Coutelle
                    Charles; Themis Mike
CORPORATE SOURCE:   Department of Obstetrics and Gynaecology, Royal Free and
                    University College Medical School, 86-96 Chenies Mews,
                    London, WC1E 6HX, United Kingdom.. a.david@ucl.ac.uk
SOURCE:             Human gene therapy, (2003 Mar 1) 14 (4) 353-64.
                    Journal code: 9008950. ISSN: 1043-0342.
PUB. COUNTRY:       United States
DOCUMENT TYPE:      Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
ENTRY MONTH:        200309
ENTRY DATE:         Entered STN: 20030328
                    Last Updated on STN: 20030928
```

Entered Medline: 20030926

AB In utero gene therapy may provide treatment of genetic diseases before significant organ damage, allow permanent genetic correction by reaching stem cell populations, and provide immune tolerance against the therapeutic transgenes and vectors. We have used percutaneous ultrasound-guided injection as a minimally invasive fetal procedure. First-generation adenoviruses encoding the nuclear localizing beta-galactosidase reporter gene or the human factor IX (hFIX) gene, or colloidal carbon were delivered via the umbilical vein (UV, n = 4), heart (intracardiac [IC], n = 2), liver parenchyma (intrahepatic [HE], n = 11), peritoneal cavity (intraperitoneal [IP], n = 14), skeletal musculature ([intramuscular [IM], n = 11), or the amniotic cavity (intraamniotic [IA], n = 14) to early-gestation fetal sheep (0.3 gestation = day 33-61). Postmortem analysis was performed at 2, 9, or 28 days after injection. Although fetal survival was between 77% and 91% for IP, HE, IA, and IM routes, no fetuses survived UV or IC procedures. The hFIX levels reaching 1900 and 401 ng/ml (IP), 30 ng/ml (HE), 66.5 and 39 ng/ml (IA), and 83 and 65.5 ng/ml (IM), respectively, were determined 2 days after injection and decreased at birth to 16.5 ng/ml (IP), 7 ng/ml (HE), 4.5 ng/ml (IA), and 4 and 0 ng/ml (IM). Polymerase chain reaction (PCR) and immunohistochemistry showed broadest hFIX transgene spread and highest localised beta-galactosidase expression, respectively, after IP administration. Antibodies were observed against vector but not against hFIX.

=> d 1-8 ibib abs

L27 ANSWER 1 OF 8 MEDLINE on STN
ACCESSION NUMBER: 2003599387 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14681699
TITLE: Widespread and efficient marker gene expression in the airway epithelia of fetal sheep after minimally invasive tracheal application of recombinant adenovirus in utero.
AUTHOR: Peebles D; Gregory L G; David A; Themis M; Waddington S N; Knapton H J; Miah M; Cook T; Lawrence L; Nivsarkar M; Rodeck C; Coutelle C
CORPORATE SOURCE: Department of Obstetrics and Gynaecology, Royal Free and University College Medical School, London, UK.
SOURCE: Gene therapy, (2004 Jan) 11 (1) 70-8.
Journal code: 9421525. ISSN: 0969-7128.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200404
ENTRY DATE: Entered STN: 20031219
Last Updated on STN: 20040423
Entered Medline: 20040422

AB Cystic fibrosis is a common lethal genetic disease caused by functional absence of the cystic fibrosis transmembrane conductance regulator (CFTR). Although a candidate disease for in utero gene therapy, demonstration of potentially therapeutic levels of transgene expression in the fetal airways after minimally invasive gene delivery is a mandatory prerequisite before application of this approach in humans can be considered. We report here on the delivery of a beta-galactosidase expressing adenovirus directly to the airways of **fetal** sheep in **utero** using ultrasound-guided **percutaneous** injection of the trachea in the **fetal** chest. Injection of adenoviral particles to the fetal airways was not associated with mortality and resulted in low-level expression in the peripheral airways. However, complexation of the virus with DEAE dextran, which confers a positive charge to the virus, and pretreatment of the airways with Na-caprate, which opens tight junctions, increased transgene expression, and a combination of these two enhancers resulted in widespread and efficient gene transfer of the fetal trachea and bronchial tree. Using a percutaneous ultrasound-guided injection technique, we have clearly demonstrated proof of principle for substantial transgene delivery to the fetal airways providing levels of gene expression that could be relevant for a therapeutic application of CFTR expressing vectors.

L27 ANSWER 2 OF 8 MEDLINE on STN
ACCESSION NUMBER: 2003144731 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12659676
TITLE: Ultrasound-guided **percutaneous** delivery of adenoviral vectors encoding the beta-galactosidase and human factor IX genes to early gestation **fetal** sheep in **utero**.
AUTHOR: David Anna; Cook Terry; Waddington Simon; Peebles Donald; Nivsarkar Megha; Knapton Holly; Miah Maznu; Dahse Thomas; Noakes David; Schneider Holm; Rodeck Charles; Coutelle Charles; Themis Mike
CORPORATE SOURCE: Department of Obstetrics and Gynaecology, Royal Free and University College Medical School, 86-96 Chenies Mews, London, WC1E 6HX, United Kingdom.. a.david@ucl.ac.uk
SOURCE: Human gene therapy, (2003 Mar 1) 14 (4) 353-64.
Journal code: 9008950. ISSN: 1043-0342.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200309
ENTRY DATE: Entered STN: 20030328
Last Updated on STN: 20030928
Entered Medline: 20030926

AB In utero gene therapy may provide treatment of genetic diseases before significant organ damage, allow permanent genetic correction by reaching stem cell populations, and provide immune tolerance against the therapeutic transgenes and vectors. We have used percutaneous ultrasound-guided injection as a minimally invasive fetal procedure. First-generation adenoviruses encoding the nuclear localizing beta-galactosidase reporter gene or the human factor IX (hFIX) gene, or colloidal carbon were delivered via the umbilical vein (UV, n = 4), heart (intracardiac [IC], n = 2), liver parenchyma (intrahepatic [HE], n = 11), peritoneal cavity (intraperitoneal [IP], n = 14), skeletal musculature ([intramuscular [IM], n = 11), or the amniotic cavity (intraamniotic [IA], n = 14) to early-gestation fetal sheep (0.3 gestation = day 33-61). Postmortem analysis was performed at 2, 9, or 28 days after injection. Although fetal survival was between 77% and 91% for IP, HE, IA, and IM routes, no fetuses survived UV or IC procedures. The hFIX levels reaching 1900 and 401 ng/ml (IP), 30 ng/ml (HE), 66.5 and 39 ng/ml (IA), and 83 and 65.5 ng/ml (IM), respectively, were determined 2 days after injection and decreased at birth to 16.5 ng/ml (IP), 7 ng/ml (HE), 4.5 ng/ml (IA), and 4 and 0 ng/ml (IM). Polymerase chain reaction (PCR) and immunohistochemistry showed broadest hFIX transgene spread and highest localised beta-galactosidase expression, respectively, after IP administration. Antibodies were observed against vector but not against hFIX.

L27 ANSWER 3 OF 8 MEDLINE on STN
ACCESSION NUMBER: 2002251214 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11991414
TITLE: Percutaneous collection of fetal fluids for detection of bovine viral diarrhea virus infection in cattle.
AUTHOR: Callan Robert J; Schnackel John A; Van Campen Hana; Mortimer Robert G; Cavender Jacqueline A; Williams Elizabeth S
CORPORATE SOURCE: Department of Clinical Sciences, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins 80523-1620, USA.
SOURCE: Journal of the American Veterinary Medical Association, (2002 May 1) 220 (9) 1348-52.
Journal code: 7503067. ISSN: 0003-1488.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200207
ENTRY DATE: Entered STN: 20020507
Last Updated on STN: 20020731
Entered Medline: 20020730

AB OBJECTIVE: To develop a method for percutaneous collection of fetal fluid

from cattle in the late stages of gestation and determine whether bovine viral diarrhea virus (BVDV) can be isolated from such fluids. DESIGN: Case series. ANIMALS: 169 pregnant beef cattle. PROCEDURE: Animals were restrained in a squeeze chute, and hair was clipped from a region of the right flank. Pregnancy was confirmed, and fetal fluids were identified by means of abdominal ultrasonography. Fetal fluid was collected with a spinal needle. Virus isolation was performed on fetal fluids, WBC lysates from 160 live calves, and tissues from 12 calves that died or were aborted. Blood samples collected from adult cattle were assayed with an immunoperoxidase monolayer assay. RESULTS: Fourteen animals aborted or delivered premature calves within 3 weeks after fetal fluid collection; however, it could not be determined whether this was a complication of the procedure or attributable to other factors. Results of BVDV isolation from fetal fluid samples were negative for 168 animals. However, a noncytopathic BVDV was isolated from fetal fluid obtained from a 2-year-old heifer; results of the immunoperoxidase assay of serum from this heifer were also positive, and a noncytopathic BVDV was isolated from tissue specimens from a stillborn calf produced by this heifer. CONCLUSIONS AND CLINICAL RELEVANCE: Results suggest that **fetal** fluids can be collected **percutaneously** from cattle in the late stages of gestation and that virus isolation performed on **fetal** fluids can be used to identify fetuses infected with BVDV in **utero** . However, safety of the procedure could not be evaluated.

L27 ANSWER 4 OF 8 MEDLINE on STN
ACCESSION NUMBER: 95387727 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7658779
TITLE: In-**utero** **percutaneous** cystoscopy in the management of **fetal** lower obstructive uropathy.
AUTHOR: Quintero R A; Johnson M P; Romero R; Smith C; Arias F; Guevara-Zuloaga F; Cotton D B; Evans M I
CORPORATE SOURCE: Department of Obstetrics and Gynaecology, Hutzel Hospital/Wayne State University, Detroit, MI, USA.
SOURCE: Lancet, (1995 Aug 26) 346 (8974) 537-40. Journal code: 2985213R. ISSN: 0140-6736.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199510
ENTRY DATE: Entered STN: 19951013
Last Updated on STN: 20000303
Entered Medline: 19951003

AB In fetuses with lower obstructive uropathy, sonography cannot establish the cause of obstruction. We assessed whether **percutaneous** **fetal** cystoscopy could be useful in the evaluation and treatment of obstructive defects in **utero**. We inserted a fibreoptic endoscope through the lumen of the needle or trocar into the fetal bladder at the time of vesicocentesis or vesicoamniotic-shunt placement and looked at the the urethra, bladder neck, and ureteral orifices. Urethral vesicoamniotic shunting was considered in suitable cases; otherwise a percutaneous shunt was inserted. Fetal cystoscopy was possible in 11 of 13 patients referred. The bladder mucosa appeared haemorrhagic or oedematous in three. The ureteral orifices were seen in 9/11 fetuses, dilation was seen in five, but was only suspected in two by ultrasound. Ureteral webs were noted in two other fetuses. Two of seven fetuses underwent urethral vesicoamniotic shunting; urethral patency was achieved with urethral probing alone in one fetus. The remaining four fetuses were shunted with a standard technique. Fetal cystoscopy helps define the underlying conditions responsible for sonographic findings of lower obstructive uropathy, and allows the introduction of new treatments.

L27 ANSWER 5 OF 8 MEDLINE on STN
ACCESSION NUMBER: 95245463 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7728265
TITLE: [Platelet transfusions in neonatology]. Transfusions plaquettaires en neonatalogie.
AUTHOR: Chabernaud J L; Lacaze T; Zupan V; Boithias C; Gross E; Dehan M
CORPORATE SOURCE: Service de reanimation neonatale, Hopital Antoine-Beclere, Clamart.

SOURCE: Transfusion clinique et biologique : journal de la Societe francaise de transfusion sanguine, (1995) 2 (1) 17-25.
Ref: 27
Journal code: 9423846. ISSN: 1246-7820.
PUB. COUNTRY: France
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199505
ENTRY DATE: Entered STN: 19950608
Last Updated on STN: 19960129
Entered Medline: 19950530

AB Thrombocytopenia occurs in 20% to 40% of infants admitted to a neonatal intensive care unit. Approximately 30% of the newborns with severe thrombocytopenia below 50.10(9)/l platelets receive platelet transfusions. The etiology may be: bacterial infection, DIC and immune mediated thrombocytopenia. The consequences of thrombocytopenia are significant risks of severe intracranial hemorrhage and neurologic morbidity. Therapeutic platelet transfusions are given to actively bleeding neonates with less than 50.10(9)/l platelets. Prophylactic platelet concentrates are usually given to infants with platelets counts below 20.10(9)/l. The standard platelet concentrate (CMV-negative donor) is the product of choice for newborns. Fetal intracranial hemorrhage is possible as soon as 20 weeks of gestation in allo-immune thrombocytopenia. Actually **percutaneous** umbilical blood sampling is very useful to measure **fetal** platelets count in order to decide in **utero** maternal platelet transfusion. Maternal irradiated plateletpheresis concentrates are preferentially infused in this indication. At the end of pregnancy, cesarean section is preferred to normal vaginal delivery if fetal thrombocytopenia below 100.10(9)/l is observed. In pregnant women with auto-immune thrombocytopenia, the decision to carry out percutaneous umbilical blood samples should be weigh relatively to the 3-5% estimated risk of serious consequences. Platelets transfusions are particularly successful in immune thrombocytopenia but less effective in other clinical circumstances.

L27 ANSWER 6 OF 8 MEDLINE on STN
ACCESSION NUMBER: 94340320 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8062030
TITLE: Fetal obstructive uropathy.
AUTHOR: Estes J M; Harrison M R
CORPORATE SOURCE: Department of Surgery, New England Deaconess Hospital, Boston, MA.
SOURCE: Seminars in pediatric surgery, (1993 May) 2 (2) 129-35.
Ref: 31
Journal code: 9216162. ISSN: 1055-8586.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199409
ENTRY DATE: Entered STN: 19941005
Last Updated on STN: 19941005
Entered Medline: 19940920

AB Congenital obstructive uropathy is a relatively common developmental malformation, and severely affected fetuses die soon after birth from oligohydramnios-induced pulmonary hypoplasia or renal failure. Prenatal ultrasonography can reliably diagnose the specific anatomic defect, and using fetal urine sampling we can determine the extent of renal damage in utero with reasonable certainty. With these diagnostic tools and an understanding of the natural history of congenital obstructive uropathy we can now make rational decisions regarding treatment. Clinical experience has demonstrated that the selected fetus may benefit from in **utero** decompression, either by **percutaneous** shunt placement or open **fetal** surgery. However, each of these procedures has certain risks that must be carefully weighed against the expected benefits. Future techniques using fetoscopic surgery may provide the ideal

therapeutic approach.

L27 ANSWER 7 OF 8 MEDLINE on STN
ACCESSION NUMBER: 90166918 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2696540
TITLE: Common fetal urinary tract anomalies.
AUTHOR: Manning F A
SOURCE: Clinics in diagnostic ultrasound, (1989) 25 139-61. Ref: 40
Journal code: 7904770. ISSN: 0193-743X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199004
ENTRY DATE: Entered STN: 19900601
Last Updated on STN: 19900601
Entered Medline: 19900412

AB The role of ultrasound in detecting fetal anomalies in general and genitourinary tract anomalies in particular has undergone, and continues to undergo, remarkable changes. The diagnostic process began with a focus on the structural nature of anomalies and now has moved forward to include a detailed assessment of the functional nature and sequelae of these lesions. Concurrent with this shift in diagnostic emphasis has been the development of the role of ultrasonography in guiding invasive diagnostic procedures, such as **percutaneous fetal** blood sampling and **fetal** urine aspiration, and in guiding therapeutic procedures, such as chronic in **utero** vesicoamniotic shunt placement. These changes are occurring against a background of the role of ultrasound in assessing pathophysiology of the anomaly and assignment of prognosis, two decisions that profoundly influence pregnancy management. The challenge for the perinatal ultrasonographer is now not only to recognize the lesion, but also to institute the further investigative steps upon which a rational management plan may be based. As illustrated in this brief review of the more common genitourinary tract anomalies, the range of outcome and the pathophysiologic progression of the disease are both wide and complex. Continued improvements in ultrasound technologies and application hold the key to the ultimate reduction in the clinical significance of these common fetal diseases.

L27 ANSWER 8 OF 8 MEDLINE on STN
ACCESSION NUMBER: 89323501 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2752169
TITLE: Perinatal diagnosis of passive ITP: use of percutaneous umbilical blood sampling (PUBS).
AUTHOR: Sacher R A; King J C
CORPORATE SOURCE: Department of Laboratory Medicine, Georgetown University Medical Center, Washington.
SOURCE: Blut, (1989 Jul) 59 (1) 128-31.
Journal code: 0173401. ISSN: 0006-5242.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198908
ENTRY DATE: Entered STN: 19900309
Last Updated on STN: 19900309
Entered Medline: 19890829

AB **Fetal** blood samples can be obtained **in utero** by direct sampling of the umbilical cord vessels, using an ultrasound guided technique termed **percutaneous** umbilical sampling (PUBS). This procedure is being used more frequently in high risk pregnancies to obtain direct fetal laboratory data. In specialized centers, with trained personnel, the technique can be used with a high degree of safety and efficiency. Direct access to the fetal circulation can also allow an accurate determination of the fetal platelet count in cases of suspected fetal thrombocytopenia. The technique may be used to plan appropriate clinical management of maternal ITP as well as to diagnose the presence of fetal alloimmune thrombocytopenia. A logical strategy for obstetric

management and evaluation of fetal risk can be planned. The procedure also has the potential to allow direct fetal treatment as has been the case in the management of severe fetal anemia.

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=> d his

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L3         59250 S PERCUTAN?
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L5             0 S L1 (S) L2 (S) L3
L6            60 S L1 (S) L2
L7         23472 S INCISION
L8             0 S L1 (S) L2  (S) L7
L9        354581 S TRANSPLANT?
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L13      1406689 S SUCTION OR VACUUM OR SUC? OR REMOV?
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L22        59250 S PERCUTAN?
L23            0 S L1 (S) L22
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L26       215420 S FETAL
L27            8 S L2 (S) L22 (S) L26

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COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                               28.09      28.30

FILE 'BIOSIS' ENTERED AT 15:57:23 ON 20 JUL 2004
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FILE 'MEDLINE' ENTERED AT 15:57:23 ON 20 JUL 2004

FILE 'CONFSCI' ENTERED AT 15:57:23 ON 20 JUL 2004
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L30          5 L16
Left truncation is not valid in the specified search field in the
specified file.  The term has been searched without left truncation.
Examples: '?TERPEN?' would be searched as 'TERPEN?' and '?FLAVONOID'
would be searched as 'FLAVONOID.'

If you are searching in a field that uses implied proximity, and you
used a truncation symbol after a punctuation mark, the system may
interpret the truncation symbol as being at the beginning of a term.
Implied proximity is used in search fields indexed as single words,
for example, the Basic Index.

=> d 1-5 ibib abs

L30    ANSWER 1 OF 5     PCTFULL   COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER:        2001062891 PCTFULL  ED 20020822
TITLE (ENGLISH):         207 HUMAN SECRETED PROTEINS
TITLE (FRENCH):          207 PROTEINES HUMAINES SECRETEES
INVENTOR(S):             NI, Jian;
                         EBNER, Reinhard;
                         LAFLEUR, David, W.;
                         MOORE, Paul, A.;
                         OLSEN, Henrik, S.;
                         ROSEN, Craig, A.;
                         RUBEN, Steven, M.;
                         SOPPET, Daniel, R.;
                         YOUNG, Paul, E.;
                         SHI, Yanggu;
                         FLORENCE, Kimberly, A.;
                         WEI, Ying-Fei;
                         FLORENCE, Charles;
                         HU, Jing-Shan;
                         LI, Yi;
                         KYAW, Hla;
                         FISCHER, Carrie, L.;
                         FERRIE, Ann, M.;
                         FAN, Ping;
                         FENG, Ping;
                         ENDRESS, Gregory, A.;
                         DILLON, Patrick, J.;
                         CARTER, Kennith, C.;
                         BREWER, Laurie, A.;
                         YU, Guo-Liang;
                         ZENG, Zhizhen;
                         GREENE, John, M.
PATENT ASSIGNEE(S):      HUMAN GENOME SCIENCES, INC.;
                         NI, Jian;
                         EBNER, Reinhard;
                         LAFLEUR, David, W.;
                         MOORE, Paul, A.;
                         OLSEN, Henrik, S.;
                         ROSEN, Craig, A.;
                         RUBEN, Steven, M.;
                         SOPPET, Daniel, R.;
                         YOUNG, Paul, E.;
                         SHI, Yanggu;
                         FLORENCE, Kimberly, A.;
                         WEI, Ying-Fei;
                         FLORENCE, Charles;
                         HU, Jing-Shan;
                         LI, Yi;
                         KYAW, Hla;
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FISCHER, Carrie, L.;
FERRIE, Ann, M.;
FAN, Ping;
FENG, Ping;
ENDRESS, Gregory, A.;
DILLON, Patrick, J.;
CARTER, Kennith, C.;
BREWER, Laurie, A.;
YU, Guo-Liang;
ZENG, Zhizhen;
GREENE, John, M.

DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001062891	A2	20010830

DESIGNATED STATES

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2001-US5614 A 20010221

PRIORITY INFO.: US 2000-60/184,836 20000224
US 2000-60/193,170 20000329

ABEN The present invention relates to the novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

ABFR La presente invention concerne de nouvelles proteines humaines secretees ainsi que des acides nucleiques isoles contenant les regions codantes des genes codant ces proteines. L'invention concerne egalement des vecteurs, des cellules hotes, des anticorps ainsi que des methodes de recombinaison permettant la production de proteines humaines secretees. L'invention concerne egalement des methodes de diagnostic et therapeutiques utiles pour diagnostiquer et traiter des maladies, des troubles et/ou des etats lies a ces nouvelles proteines humaines secretees.

L30 ANSWER 2 OF 5 PCTFULL COPYRIGHT 2004 Univentio on STN

ACCESSION NUMBER: 2001042451 PCTFULL ED 20020827

TITLE (ENGLISH): FULL-LENGTH HUMAN cDNAs ENCODING POTENTIALLY SECRETED PROTEINS

TITLE (FRENCH): ADNc HUMAINS PLEINE LONGUEUR CODANT POUR DES PROTEINES POTENTIELLEMENT SECRETEES

INVENTOR(S): DUMAS MILNE EDWARDS, Jean-Baptiste;
BOUGUELERET, Lydie;
JOBERT, Severin

PATENT ASSIGNEE(S): GENSET;
DUMAS MILNE EDWARDS, Jean-Baptiste;
BOUGUELERET, Lydie;
JOBERT, Severin

DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001042451	A2	20010614

DESIGNATED STATES

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF

CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2000-IB1938 A 20001207
PRIORITY INFO.: US 1999-60/169,629 19991208
US 2000-60/187,470 20000306

ABEN The invention concerns GENSET polynucleotides and polypeptides. Such GENSET products may be used as reagents in forensic analyses, as chromosome markers, as tissue/cell/organelle-specific markers, in the production of expression vectors. In addition, they may be used in screening and diagnosis assays for abnormal GENSET expression and/or biological activity and for screening compounds that may be used in the treatment of GENSET-related disorders.

ABFR L'invention concerne des polynucleotides et des polypeptides GENSET. Ces produits GENSET peuvent s'utiliser comme reactifs dans des analyses judiciaires, en tant que marqueurs chromosomiques, comme marqueurs specifiques a un tissu/cellule/organite, dans la production de vecteurs d'expression. En outre, ils peuvent s'utiliser dans des dosages de criblage et diagnostiques d'une expression GENSET et/ou une activite biologique anormales ainsi que pour le criblage de composes pouvant etre utilises dans le traitement de troubles lies a GENSET.

L30 ANSWER 3 OF 5 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1995009235 PCTFULL ED 20020514
TITLE (ENGLISH): IMMUNODEFICIENT MOUSE MODELS OF PATHOGENESIS OF HUMAN DISEASE AND EFFICACY AND TOXICITY OF DISEASE TREATMENTS
TITLE (FRENCH): MODELES DE SOURIS IMMUNODEFICIENTES POUR ANALYSER LA PATHOGENESE DE MALADIES HUMAINES ET L'EFFICACITE ET LA TOXICITE DES TRAITEMENTS UTILISES
INVENTOR(S): GOLDSTEIN, Harris;
KOLLMANN, Tobias, R.
PATENT ASSIGNEE(S): ALBERT EINSTEIN COLLEGE OF MEDICINE OF YESHIVA UNIVERSITY
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9509235	A1	19950406

DESIGNATED STATES
W: CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
APPLICATION INFO.: WO 1994-US10957 A 19940928
PRIORITY INFO.: US 1993-127,880 19930928
US 1994-252,773 19940602

ABEN BTCD-hu2 chimeric mice for assaying the pathogenesis of human disease and efficacy and toxicity
of disease treatments have been developed by implantation of human fetal thymus and human fetal
liver tissue under the kidney capsule of T- and B-cell deficient mice, by engraftment of human fetal
bone marrow cells into T- and B-cell deficient mice and combinations of both. The resulting chimeric
mice contain human T-cells, human monocytes or combinations thereof in sufficient quantity in the
mouse peripheral lymphoid compartment to support HIV-1 infection following intraperitoneal
inoculation of HIV-1 into the mouse.

ABFR Souris chimeriques BTCD-hu2 destinees a l'etude de la pathogenese de maladies humaines et a
evaluer l'efficacite et la toxicite des traitements utilises, produites par implantation de tissus
de foie et de thymus de foetus humains sous la capsule du rein de souris presentant une deficience
en lymphocytes T et B, par greffe de cellules de moelle osseuse foetale humaine sur des souris
presentant une deficience en lymphocytes T et B et des combinaisons des deux. Les souris chimeriques
qui en resultent contiennent dans leur compartiment lymphoide peripherique des lymphocytes T
humains, des monocytes humains ou des combinaisons des deux en quantite suffisante pour supporter
une infection par le VIH-1 a la suite de l'inoculation intraperitoneale de VIH-1 chez lesdites

souris.

L30 ANSWER 4 OF 5 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1995005843 PCTFULL ED 20020514
TITLE (ENGLISH): METHOD FOR PRODUCING A HIGHLY ENRICHED POPULATION OF HEMATOPOIETIC STEM CELLS
TITLE (FRENCH): PROCEDE DE PRODUCTION D'UNE POPULATION DE CELLULES SOUCHES HEMATOPOIETIQUES FORTEMENT ENRICHIE
INVENTOR(S): DiGIUSTO, David;
GALY, Anne
PATENT ASSIGNEE(S): SYSTEMIX, INC.;
DiGIUSTO, David;
GALY, Anne
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9505843	A1	19950302

DESIGNATED STATES
W: AU CA JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
APPLICATION INFO.: WO 1994-US9760 A 19940825
PRIORITY INFO.: US 1993-8/112,603 19930825
ABEN The present invention provides a simple and reliable means for isolating populations of hematopoietic cells enriched for stem cell activity on the basis of possession of high CD34 cell surface antigen density (CD34hi). CD34hi cell preparations are useful, for example, for drug discovery efforts, for reconstituting hematopoiesis in an animal lacking a functioning hematopoietic system, and for gene therapies.
ABFR L'invention constitue un moyen simple et de grande fiabilite permettant d'isoler des populations de cellules hematopoietiques enrichies en cellules souches, selectionnees en fonction de leur forte densite d'antigenes de surface des cellules CD34 (CD34hi). Les preparations a forte densite de cellules CD34 sont d'une grande utilite, par exemple, pour la recherche de nouveaux medicaments, pour la reconstitution de l'hematopoiese chez un animal presentant un dysfonctionnement du systeme hematopoietique et pour les therapies geniques.

L30 ANSWER 5 OF 5 USPATFULL on STN
ACCESSION NUMBER: 97:99016 USPATFULL
TITLE: Method for producing a highly enriched population of hematopoietic stem cells
INVENTOR(S): DiGiusto, David, Palo Alto, CA, United States
Galy, Anne, Palo Alto, CA, United States
PATENT ASSIGNEE(S): Systemix, Inc., Palo Alto, CA, United States (U.S. corporation)

NUMBER	KIND	DATE
PATENT INFORMATION: US 5681559		19971028
APPLICATION INFO.: US 1995-474208		19950606 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-112603, filed on 25 Aug 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Ziska, Suzanne E.
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 40 Drawing Figure(s); 13 Drawing Page(s)
LINE COUNT: 1339
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a simple and reliable means for isolating populations of hematopoietic cells enriched for stem cell activity on the basis of possession of high CD34 cell surface antigen density

("CD34hi"). CD34.sup.hi cell preparations are useful, for example, for drug discovery efforts, for reconstituting hematopoiesis in an animal lacking a functioning hematopoietic system, and for gene therapies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 15:34:54 ON 20 JUL 2004)

FILE 'MEDLINE' ENTERED AT 15:35:04 ON 20 JUL 2004

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L2        146532 S IN UTERO OR DONOR
L3         59250 S PERCUTAN?
L4             2 S L1 (S) L2 (S) 3
L5             0 S L1 (S) L2 (S) L3
L6            60 S L1 (S) L2
L7         23472 S INCISION
L8             0 S L1 (S) L2  (S) L7
L9        354581 S TRANSPLANT?
L10           14 S L1 (S) L2  (S) L9
L11      1197155 S SUCTION OR VACUUM OR SUC?
L12            1 S L1 (S) L2  (S) L9 (S) L11
L13      1406689 S SUCTION OR VACUUM OR SUC? OR REMOV?
L14            1 S L1 (S) L2  (S) L9 (S) L13
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L20           64 S L1 (L) L15 (L) L19
L21           13 S L1 (L) L15 (L) L19 (L) L13
L22        59250 S PERCUTAN?
L23            0 S L1 (S) L22
L24            2 S L1 (L) L22
L25           79 S L2 (S) L22
L26       215420 S FETAL
L27            8 S L2 (S) L22 (S) L26
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FILE 'BIOSIS, EMBASE, CAPLUS, PCTFULL, USPATFULL, SCISEARCH, MEDLINE, CONFSCI' ENTERED AT 15:57:23 ON 20 JUL 2004

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L30            5 S L16
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4 FILES SEARCHED...
L31 3 L5

=> d 1-3 ibib abs

L31 ANSWER 1 OF 3 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 1999267995 EMBASE
TITLE: Successful expression of β-galactosidase and factor IX transgenes in fetal and neonatal sheep after ultrasound-guided percutaneous adenovirus vector administration into the umbilical vein.
AUTHOR: Themis M.; Schneider H.; Kiserud T.; Cook T.; Adebakin S.; Jezzard S.; Forbes S.; Hanson M.; Pavirani A.; Rodeck C.; Coutelle C.
CORPORATE SOURCE: Prof. C. Coutelle, Cyst. Fibro. Gene Therapy Res. Group, Imp. College Science Technol. Med., Division of Biomedical Sciences, London SW7 2AZ, United Kingdom
SOURCE: Gene Therapy, (1999) 6/7 (1239-1248).
Refs: 33
ISSN: 0969-7128 CODEN: GETHEC
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 022 Human Genetics

LANGUAGE: English
SUMMARY LANGUAGE: English
AB In **utero** somatic gene therapy in the later stages of pregnancy may allow targeting of organ systems which are difficult to reach later in life and to prevent the development of tissue damage otherwise caused by the early onset of inherited diseases. We report here on the **percutaneous** delivery of two adenoviral vectors, containing the β-galactosidase reporter gene and the human Factor IX gene respectively, to the fetal liver and circulation by ultrasound-guided umbilical vein puncture similar to procedures used in human pregnancy. Vector spread, as detected by PCR analysis for the β-galactosidase encoding vector, was found in almost all fetal and neonatal organs and in the maternal liver. Expression of the β-galactosidase transgene was detected in many **fetal** tissues by RT-PCR. High β-galactosidase production was shown by immuno-histochemistry predominantly in the liver, where about 30% of the hepatocytes stained positive, and in the adrenal cortex. Production of factor IX was determined by ELISA in the plasma of treated fetuses and newborn lambs and reached at birth up to 80% of the normal human plasma concentration. This demonstrates a very hopeful proof of principle for the development of prenatal treatment of many genetic diseases but also requires more detailed investigations with respect to the observed systemic spread of the vector.

L31 ANSWER 2 OF 3 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2001062891 PCTFULL ED 20020822
TITLE (ENGLISH): 207 HUMAN SECRETED PROTEINS
TITLE (FRENCH): 207 PROTEINES HUMAINES SECRETEES
INVENTOR(S): NI, Jian;
EBNER, Reinhard;
LAFLEUR, David, W.;
MOORE, Paul, A.;
OLSEN, Henrik, S.;
ROSEN, Craig, A.;
RUBEN, Steven, M.;
SOPPET, Daniel, R.;
YOUNG, Paul, E.;
SHI, Yanggu;
FLORENCE, Kimberly, A.;
WEI, Ying-Fei;
FLORENCE, Charles;
HU, Jing-Shan;
LI, Yi;
KYAW, Hla;
FISCHER, Carrie, L.;
FERRIE, Ann, M.;
FAN, Ping;
FENG, Ping;
ENDRESS, Gregory, A.;
DILLON, Patrick, J.;
CARTER, Kennith, C.;
BREWER, Laurie, A.;
YU, Guo-Liang;
ZENG, Zhizhen;
GREENE, John, M.
PATENT ASSIGNEE(S): HUMAN GENOME SCIENCES, INC.;
NI, Jian;
EBNER, Reinhard;
LAFLEUR, David, W.;
MOORE, Paul, A.;
OLSEN, Henrik, S.;
ROSEN, Craig, A.;
RUBEN, Steven, M.;
SOPPET, Daniel, R.;
YOUNG, Paul, E.;
SHI, Yanggu;
FLORENCE, Kimberly, A.;
WEI, Ying-Fei;
FLORENCE, Charles;
HU, Jing-Shan;
LI, Yi;

KYAW, Hla;
FISCHER, Carrie, L.;
FERRIE, Ann, M.;
FAN, Ping;
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ENDRESS, Gregory, A.;
DILLON, Patrick, J.;
CARTER, Kennith, C.;
BREWER, Laurie, A.;
YU, Guo-Liang;
ZENG, Zhizhen;
GREENE, John, M.

DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001062891	A2	20010830

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2001-US5614 A 20010221
PRIORITY INFO.: US 2000-60/184,836 20000224
US 2000-60/193,170 20000329

ABEN The present invention relates to the novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

ABFR La presente invention concerne de nouvelles proteines humaines secretees ainsi que des acides nucleiques isoles contenant les regions codantes des genes codant ces proteines. L'invention concerne egalement des vecteurs, des cellules hotes, des anticorps ainsi que des methodes de recombinaison permettant la production de proteines humaines secretees. L'invention concerne egalement des methodes de diagnostic et therapeutiques utiles pour diagnostiquer et traiter des maladies, des troubles et/ou des etats lies a ces nouvelles proteines humaines secretees.

L31 ANSWER 3 OF 3 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
ACCESSION NUMBER: 1999:543918 SCISEARCH
THE GENUINE ARTICLE: 213GP
TITLE: Successful expression of beta-galactosidase and factor IX transgenes in fetal and neonatal sheep after ultrasound-guided percutaneous adenovirus vector administration into the umbilical vein
AUTHOR: Themis M; Schneider H; Kiserud T; Cook T; Adebakin S; Jezzard S; Forbes S; Hanson M; Pavirani A; Rodeck C; Coutelle C (Reprint)
CORPORATE SOURCE: UNIV LONDON IMPERIAL COLL SCI TECHNOL & MED, CYST FIBROSIS GENE THERAPY RES GRP, DIV BIOMED SCI, LONDON SW7 2AZ, ENGLAND (Reprint); UNIV LONDON IMPERIAL COLL SCI TECHNOL & MED, CYST FIBROSIS GENE THERAPY RES GRP, DIV BIOMED SCI, LONDON SW7 2AZ, ENGLAND; ROYAL FREE & UNIV COLL MED SCH, DEPT OBSTET & GYNAECOL, LONDON, ENGLAND; UNIV LONDON IMPERIAL COLL SCI TECHNOL & MED, SCH MED, DEPT HISTOPATHOL, LONDON, ENGLAND; UNIV LONDON IMPERIAL COLL SCI TECHNOL & MED, SCH MED, LIVER GRP LAB, LONDON, ENGLAND; TRANSGENE, STRASBOURG, FRANCE
COUNTRY OF AUTHOR: ENGLAND; FRANCE
SOURCE: GENE THERAPY, (JUL 1999) Vol. 6, No. 7, pp. 1239-1248. Publisher: STOCKTON PRESS, HOUNDMILLS, BASINGSTOKE RG21 6XS, HAMPSHIRE, ENGLAND.
ISSN: 0969-7128.

DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 33
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB In **utero** somatic gene therapy in the later stages of pregnancy may allow targeting of organ systems which are difficult to reach later in life and to prevent the development of tissue damage otherwise caused by the early onset of inherited diseases. We report here on the **percutaneous** delivery of two adenoviral vectors, containing the beta-galactosidase reporter gene and the human Factor IX gene respectively, to the fetal liver and circulation by ultrasound-guided umbilical vein puncture similar to procedures used in human pregnancy. Vector spread, as detected by PCR analysis for the beta-galactosidase encoding vector, was found in almost all fetal and neonatal organs and in the maternal liver Expression of the beta-galactosidase transgene was detected in many fetal tissues by RT-PCR. High beta-galactosidase production was shown by immuno-histochemistry predominantly in the liver, where about 30% of the hepatocytes stained positive, and in the adrenal cortex. Production of factor IX was determined by ELISA in the plasma of treated fetuses and newborn lambs and reached at birth up to 80% of the normal human plasma concentration. This demonstrates a very hopeful proof of principle for the development of prenatal treatment of many genetic diseases but also requires more detailed investigations with respect to the observed systemic spread of the vector.

=> d his

(FILE 'HOME' ENTERED AT 15:34:54 ON 20 JUL 2004)

FILE 'MEDLINE' ENTERED AT 15:35:04 ON 20 JUL 2004

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L1          6659 S FETAL TISSUE
L2        146532 S IN UTERO OR DONOR
L3         59250 S PERCUTAN?
L4             2 S L1 (S) L2 (S) 3
L5             0 S L1 (S) L2 (S) L3
L6            60 S L1 (S) L2
L7         23472 S INCISION
L8             0 S L1 (S) L2  (S) L7
L9        354581 S TRANSPLANT?
L10           14 S L1 (S) L2  (S) L9
L11      1197155 S SUCTION OR VACUUM OR SUC?
L12            1 S L1 (S) L2  (S) L9 (S) L11
L13      1406689 S SUCTION OR VACUUM OR SUC? OR REMOV?
L14            1 S L1 (S) L2  (S) L9 (S) L13
L15       247721 S ?CUTAN?
L16            0 S L1 (S) L2  (S) L9 (S) L15
L17            0 S L1 (L) L2  (L) L9 (L) L15
L18           21 S L1 (L) L2  (L) L9 (L) L13
L19           64 S L1 (L) L15
L20           64 S L1 (L) L15 (L) L19
L21           13 S L1 (L) L15 (L) L19 (L) L13
L22        59250 S PERCUTAN?
L23            0 S L1 (S) L22
L24            2 S L1 (L) L22
L25           79 S L2 (S) L22
L26       215420 S FETAL
L27            8 S L2 (S) L22 (S) L26
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FILE 'BIOSIS, EMBASE, CAPLUS, PCTFULL, USPATFULL, SCISEARCH, MEDLINE, CONFSCI' ENTERED AT 15:57:23 ON 20 JUL 2004

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L28           80 S L14
L29           69 DUP REM L28 (11 DUPLICATES REMOVED)
L30            5 S L16
L31            3 S L5
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=> s l12
4 FILES SEARCHED...

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L32           74 L12
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=> dup rem l32
PROCESSING COMPLETED FOR L32
L33          63 DUP REM L32 (11 DUPLICATES REMOVED)

=> d 1-63 ibib abs

L33    ANSWER 1 OF 63    PCTFULL   COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER:        2004048411 PCTFULL  ED 20040615  EW 200424
TITLE (ENGLISH):         COMPOUNDS AND METHODS FOR MODULATING FUNCTIONS OF
                         NONCLASSICAL CADHERINS
TITLE (FRENCH):          COMPOSES ET TECHNIQUES DESTINES A MODULER DES FONCTIONS
                         DE CADHERINES NON CLASSIQUES
INVENTOR(S):             BLASCHUK, Orest, W., 4998 de Maisonneuve West, Suite
                         1520, Westmount, Quebec H3Z 1N2, CA [CA, CA];
                         MICHAUD, Stephanie, D., 229 rue Gamelin, Hull, Quebec
                         J8Y 1W5, CA [CA, CA]
PATENT ASSIGNEE(S):      ADHEREX TECHNOLOGIES, INC., 600 Peter Morand Crescent,
                         Suite 220, Ottawa, Ontario K1G 5Z3, CA [CA, CA], for
                         all designates States except US;
                         BLASCHUK, Orest, W., 4998 de Maisonneuve West, Suite
                         1520, Westmount, Quebec H3Z 1N2, CA [CA, CA], for US
                         only;
                         MICHAUD, Stephanie, D., 229 rue Gamelin, Hull, Quebec
                         J8Y 1W5, CA [CA, CA], for US only
AGENT:                   SCHROEDER, Hans$, 160 Elgin Street, Suite 2600, Ottawa,
                         Ontario K1P 1C3$, CA
LANGUAGE OF FILING:      English
LANGUAGE OF PUBL.:       English
DOCUMENT TYPE:           Patent
PATENT INFORMATION:
                         NUMBER              KIND     DATE
                         ---------------------------------
                         WO 2004048411         A2 20040610
DESIGNATED STATES
       W:                AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR
                         CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU
                         ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA
                         MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC
                         SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN
                         YU ZA ZM ZW
       RW (ARIPO):       GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
       RW (EAPO):        AM AZ BY KG KZ MD RU TJ TM
       RW (EPO):         AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU
                         MC NL PT RO SE SI SK TR
       RW (OAPI):        BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
APPLICATION INFO.:       WO 2003-IB6208        A  20031114
PRIORITY INFO.:          US 2002-60/426,551       20021114
                         US 2002-60/426,689       20021114
ABEN   Modulating agents and methods for enhancing or inhibiting nonclassical
       cadherin-mediated functions, such as atypical or desmosomal cadherin
       -mediated functions, are provided. The modulating agents comprise at
       least a tryptophan-containing cell adhesion recognition sequence of an
       atypical and/or desmosomal cadherin, a conservative analogue or
       peptidomimetic thereof, or an antibody or fragment thereof that
       specifically binds to such a cell adhesion recognition sequence.
       Modulating agents may additionally comprise one or more cell adhesion
       recognition sequences recognized by cadherins and/or other adhesion
       molecules. Such modulating agents may, but need not, be linked to a
       targeting agent, pharmaceutically active substance and/or support
       material.
ABFR   La presente invention concerne des agents de modulation et des
       techniques destinees a renforcer ou a inhiber des fonctions non
       classiques induites par la cadherine, telles que des fonctions induites
       par la cadherine atypiques ou desmosomales. Ces agents de modulation
       comprennent au moins une sequence de reconnaissance d'adhesion
       cellulaire contenant du tryptophane d'une cadherine atypique ou
       desmosomale, un analogue conservateur ou un peptidomimetique de celui-ci
       ou un anticorps ou un fragment de celui-ci qui se lie specifiquement a
       cette sequence de reconnaissance d'adhesion cellulaire. Des agents de
       modulation peuvent de plus comprendre une ou plusieurs sequences de
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reconnaissance d'adhesion cellulaire reconnues par des cadherines et/ou par d'autres molecules d'adhesion. Ces agents de modulation peuvent, mais ce n'est pas obligatoire, etre lies a un agent de ciblage, a une substance pharmaceutiquement active et/ou a un materiau de support.

L33 ANSWER 2 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2004045592 PCTFULL ED 20040608 EW 200423
TITLE (ENGLISH): COMPOUNDS AND METHODS FOR INCREASING NEUROGENESIS
TITLE (FRENCH): COMPOSES ET METHODES PERMETTANT D'AUGMENTER LA NEUROGENESE
INVENTOR(S): BERTILSSON, Goeran, Graensvaegen 5, S-137 41 Vaesterhaninge, SE [SE, SE];
ERLANDSSON, Rikard, Lavettvaegen 21, S-174 59 Sundyberg, SE [SE, SE];
FRISEN, Jonas, Departement of Cell and Molecular Biology, Medical Nobel Institute, Karolinska Institute, S-171 77 Stockholm, SE [SE, SE];
HAEGESTRAND, Anders, Danaroevaegen 31, S-182 36 Danderyd, SE [SE, SE];
HEIDRICH, Jessica, Bolmensvaegen 12, S-120 50 Arsta, SE [SE, SE];
HELLSTROeM, Kristina, Erikshaellsgatan 81, S-121 46 Soedertaelje, SE [SE, SE];
HAeGGBLAD, Johan, Vaestgoetagraend 21, S-118 28 Vaestgoetagraend, SE [SE, SE];
JANSSON, Katarina, Kalmagatan 28, S-121 45 Joanneshov, SE [SE, SE];
KORTESMAA, Jarkko, Fatburs Brunnsgatan 27, S-118 28 Stockholm, SE [SE, SE];
LINDQUIST, Per, Staltradsvaegen 21, S-168 68 Bromma, SE [SE, SE];
LUNDH, Hanna, Tunvaegen, S-170 68 Solna, SE [SE, SE];
MCGUIRE, Jacqueline, c/o Neuronova AB, Fiskartorpsvaegen 15A-D, S-114 33 Stockholm, SE [SE, SE];
MERCER, Alex, Staltradsvaegen 15, S-168 68 Bromma, SE [SE, SE];
NJBERG, Karl, Vacksalag 31B:1018, S-753 31 Uppsala, SE [SE, SE];
OSSOINAK, Amina, Tomtebogatan 38, S-113 38 Stockholm, SE [SE, SE];
PATRONE, Cesare, Haegerstenvaegen 111, S-126 49 Haegersten, SE [SE, SE];
ROeNNHOLM, Harriet, Tornslingan 8, 1tr, S-142 61 Trangsund, SE [SE, SE];
ZACHRISSON, Olof, Kaelvestavaegen 65, S-163 54 Spanga, SE [SE, SE];
WIKSTROeM, Lilian, Stjaernfallsvaegen 9, S-163 54 Spanga, SE [SE, SE]
PATENT ASSIGNEE(S): NEURONOVA AB, Fiskartorpsvaegen 15A-D, S-114 33 Stockholm, SE [SE, SE], for all designates States except US;
BERTILSSON, Goeran, Graensvaegen 5, S-137 41 Vaesterhaninge, SE [SE, SE];
ERLANDSSON, Rikard, Lavettvaegen 21, S-174 59 Sundyberg, SE [SE, SE];
FRISEN, Jonas, Departement of Cell and Molecular Biology, Medical Nobel Institute, Karolinska Institute, S-171 77 Stockholm, SE [SE, SE];
HAEGESTRAND, Anders, Danaroevaegen 31, S-182 36 Danderyd, SE [SE, SE];
HEIDRICH, Jessica, Bolmensvaegen 12, S-120 50 Arsta, SE [SE, SE];
HELLSTROeM, Kristina, Erikshaellsgatan 81, S-121 46 Soedertaelje, SE [SE, SE];
HAeGGBLAD, Johan, Vaestgoetagraend 21, S-118 28 Vaestgoetagraend, SE [SE, SE];
JANSSON, Katarina, Kalmagatan 28, S-121 45 Joanneshov, SE [SE, SE];
KORTESMAA, Jarkko, Fatburs Brunnsgatan 27, S-118 28 Stockholm, SE [SE, SE];

LINDQUIST, Per, Staltradsvaegen 21, S-168 68 Bromma, SE [SE, SE];
LUNDH, Hanna, Tunvaegen, S-170 68 Solna, SE [SE, SE];
MCGUIRE, Jacqueline, c/o Neuronova AB, Fiskartorpsvaegen 15A-D, S-114 33 Stockholm, SE [SE, SE];
MERCER, Alex, Staltradsvaegen 15, S-168 68 Bromma, SE [SE, SE];
NJBERG, Karl, Vacksalag 31B:1018, S-753 31 Uppsala, SE [SE, SE];
OSSOINAK, Amina, Tomtebogatan 38, S-113 38 Stockholm, SE [SE, SE];
PATRONE, Cesare, Haegerstenvaegen 111, S-126 49 Haegersten, SE [SE, SE];
ROeNNHOLM, Harriet, Tornslingan 8, 1tr, S-142 61 Trangsund, SE [SE, SE];
ZACHRISSON, Olof, Kaelvestavaegen 65, S-163 54 Spanga, SE [SE, SE];
WIKSTROeM, Lilian, Stjaernfallsvaegen 9, S-163 54 Spanga, SE [SE, SE]

AGENT: E. BLUM & CO.$, Vorderberg 11, CH-8044 Zuerich$, CH
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2004045592	A2	20040603

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
RW (ARIPO): BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2003-IB5311 A 20031120
PRIORITY INFO.: US 2002-60/427,912 20021120

ABEN The invention is directed to methods of promoting neurogenesis by contacting neuronal tissue with intracellular cAMP elevating agents and intracellular Ca¿2+? elevating agents. Novel agents for promoting neurogenesis are disclosed. These agents include novel agents for increasing intracellular cAMP.

ABFR L'invention concerne des methodes permettant de promouvoir la neurogenese par mis en contact d'un tissu neural avec des agents d'elevation de niveau intracellulaire de cAMP et de Ca<sb>2+</sb>. L'invention concerne de nouveaux agents permettant de promouvoir la neurogenese, ces agents permettant d'augmenter le niveau intracellulaire de cAMP.

L33 ANSWER 3 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2004044000 PCTFULL ED 20040602 EW 200422
TITLE (ENGLISH): COMPOUNDS AND METHODS FOR MODULATING FUNCTIONS OF CLASSICAL CADHERINS
TITLE (FRENCH): COMPOSES ET PROCEDES DE MODULATION DE FONCTIONS DE CADHERINES CLASSIQUES
INVENTOR(S): BLASCHUK, Orest, W., Suite 1520, 4998 de Maisonneuve West, Westmount, Quebec H3Z 1N2, CA [CA, CA];
MICHAUD, Stephanie, Denise, 229 rue Gamelin, Hull, Quebec J8Y 1W5, CA [CA, CA]
PATENT ASSIGNEE(S): ADHEREX TECHNOLOGIES, INC., Suite 220, 600 Peter Morand Crescent, Ottawa, Ontario K1G 5Z3, CA [CA, CA], for all designates States except US;
BLASCHUK, Orest, W., Suite 1520, 4998 de Maisonneuve West, Westmount, Quebec H3Z 1N2, CA [CA, CA], for US only;
MICHAUD, Stephanie, Denise, 229 rue Gamelin, Hull,

Quebec J8Y 1W5, CA [CA, CA], for US only
AGENT: DE KOCK, Elbie, R.$, Russell Reyneke, Suite 700, Two Bentall Centre, 555 Burrard Street, Vancouver, British Columbia V7X 1M8$, CA
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2004044000	A2	20040527

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
RW (ARIPO): BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2003-CA1746 A 20031114
PRIORITY INFO.: US 2002-60/426,194 20021114

ABEN Modulating agents and methods for enhancing or inhibiting classical cadherin-mediated functions are provided. The modulating agents comprise at least a tryptophan-containing cell adhesion recognition sequence of a classical cadherin molecule, a conservative analogue or peptidomimetic thereof, or an antibody or fragment thereof that specifically binds to such a cell adhesion recognition sequence. Modulating agents may additionally comprise one or more cell adhesion recognition sequences recognized by cadherins and/or other adhesion molecules. Such modulating agents may, but need not, be linked to a targeting agent, pharmaceutically active substance and/or support material.

ABFR L'invention concerne des agents et des procedes de modulation permettant d'ameliorer ou d'inhiber des fonctions regulees par des cadherines classiques. Ces agents de modulation comprennent au moins une sequence de reconnaissance d'adhesion de cellules contenant tryptophane d'une molecule de cadherine classique, un analogue conservatif ou un peptidomimetique de cette sequence, ou un anticorps ou un fragment d'anticorps de cette sequence qui se lie specifiquement a cette sequence de reconnaissance d'adhesion de cellules. Des agents de modulation peuvent comprendre en plus une ou plusieurs sequences de reconnaissance d'adhesion de cellules reconnues par les cadherines et/ou par d'autres molecules d'adhesion. Ces agents de modulation peuvent, eventuellement, etre lies a un agent de ciblage, a une substance pharmaceutiquement active et/ou a une matiere de support.

L33 ANSWER 4 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2004016772 PCTFULL ED 20040302 EW 200409
TITLE (ENGLISH): A METHOD OF CELL RE-PROGRAMMING BY CYTOPLASMIC TRANSFER
TITLE (FRENCH): PROCEDE DE REPROGRAMMATION CELLULAIRE PAR TRANSFERT CYTOPLASMIQUE
INVENTOR(S): NIEHRS, Christof, Klingenteichstrasse 6b, 69117 Heidelberg, DE [DE, DE];
HANSIS, Christoph, Humboldtstrasse 17, 53115 Bonn, DE [DE, DE]
PATENT ASSIGNEE(S): DEUTSCHES KREBSFORSCHUNGSZENTRUM STIFTUNG DES OeFFENTLICHEN RECHTS, Im Neuenheimer Feld 280, 69120 Heidelberg, DE [DE, DE], for all designates States except US;
NIEHRS, Christof, Klingenteichstrasse 6b, 69117 Heidelberg, DE [DE, DE], for US only;
HANSIS, Christoph, Humboldtstrasse 17, 53115 Bonn, DE [DE, DE], for US only
AGENT: HUHN, Michael$, Isenbruck, Boesl, Hoerschler, Wichmann, Huhn, Theodor-Heuss-Anlage 12, 68165 Mannheim$, DE
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent

PATENT INFORMATION:

	NUMBER	KIND	DATE
	WO 2004016772	A1	20040226

DESIGNATED STATES

W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
RW (ARIPO):	GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO):	AM AZ BY KG KZ MD RU TJ TM
RW (EPO):	AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
RW (OAPI):	BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.:	WO 2003-EP8930	A	20030812
PRIORITY INFO.:	EP 2002-02018014.7		20020812

ABEN The present invention refers to a method for reprogramming a recipient cell, the method comprising, first, contacting the recipient cell with the cytoplasm of a donor cell from an amphibian or from a bony fish and, second, detecting the expression of embryonic markers in the recipient cell. Furthermore, the present invention contemplates the therapeutic use of the disclosed method for diseases requiring the replacement or renewal of cells.

ABFR La presente invention concerne un procede permettant de reprogrammer une cellule receptrice. La 1<sp>ere</sp> operation de ce procede consiste en une mise en contact de la cellule receptrice avec le cytoplasme d'une cellule donneuse prelevee sur un amphibien ou un poisson osseux. La 2<sp>eme</sp> operation consiste en une detection de l'expression de marqueurs embryonnaires dans la cellule receptrice. L'invention concerne egalement concerne egalement l'utilisation therapeutique des procedes de l'invention pour des maladies necessitant le remplacement ou le renouvellement de cellules.

ACCESSION NUMBER:	2004275182 EMBASE
TITLE:	Is there a future for neural transplantation?.
AUTHOR:	Narrower T.P.; Barker R.A.
CORPORATE SOURCE:	Dr. T.P. Narrower, Cambridge Centre for Brain Repair, Forvie Site, Robinson Way, Cambridge CB22PY, United Kingdom. DRSHarrower@aol.com
SOURCE:	BioDrugs, (2004) 18/3 (141-153). Refs: 141 ISSN: 1173-8804 CODEN: BIDRF4
COUNTRY:	New Zealand
DOCUMENT TYPE:	Journal; General Review
FILE SEGMENT:	008 Neurology and Neurosurgery 037 Drug Literature Index 038 Adverse Reactions Titles
LANGUAGE:	English
SUMMARY LANGUAGE:	English

AB Traditionally neural **transplantation** has had as its central tenet the replacement of missing neurons that have been lost because of neurodegenerative processes, as exemplified by diseases **such** as Parkinson disease (PD). However, the effectiveness and widespread application of this approach clinically has been limited, primarily because of the poor **donor** supply of human fetal neural tissue and the incomplete neurobiological understanding of the circuit reconstruction required to normalize function in these diseases. So, in PD the progress from promising neural **transplantation** in animal models to proof-of-principle, open-labeled clinical **transplants**, to randomized, placebo-controlled studies of neural **transplantation** has not been straightforward. The emergence of previously undescribed adverse effects and lack of significant functional advantage in recent clinical studies has been disappointing and has served to cast a new, and perhaps more realistic, perspective on this treatment approach. In fact, there have been calls by some involved in neural **transplantation** to return to the drawing board before pressing on with further clinical trials, and the return to basic experimentation.

This therefore precipitates the question - is there a future for neural **transplantation**? It is important to remember that there are a number of possible explanations for the disappointing results from the recent clinical trials in PD, ranging from the mode of **transplantation** to patient selection. Nevertheless, almost irrespective of these reasons for the current trial results, there have always been significant practical and ethical problems with using human **fetal tissue**, and so a number of alternative cell sources have been investigated. These alternative sources include stem cells, which are attractive for cell-based therapies because of their potential ease of isolation, propagation and manipulation, and their ability in some cases to migrate to areas of pathology and differentiate into specific and appropriate cell types. Furthermore, the availability of stem cells derived from non-embryonic sources (e.g. adult stem cells derived from the sub-ventricular zone) has removed some of the ethical limitations associated with the use of embryonic human tissue. These potentially beneficial aspects of stem cells means that there is a future for neural **transplantation** as a means of treating patients with a range of neurological disorders, although whether this will ever translate into a truly effective, widely available therapy remains unknown.

L33 ANSWER 6 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2003094965 PCTFULL ED 20031125 EW 200347
TITLE (ENGLISH): MODULATION OF NEURAL STEM CELLS AND NEURAL PROGENITOR CELLS
TITLE (FRENCH): MODULATION DE CELLULES SOUCHES NEURALES ET DE CELLULES PROGENITRICES NEURALES
INVENTOR(S): LINDQUIST, Per, Staltrtadsvagen 21, S-168 68 Bromma, SE [SE, SE];
MERCER, Alex, Staltradsvagen 15, S-168 68 Bromma, SE [SE, SE];
RONNHOLM, Harriet, Tornslingan 8, 1 tr, S-142 61 Trangsund, SE [SE, SE];
WIKSTROM, Lilian, Stjarnfallsvagen 9, S-163 54 Spanga, SE [SE, SE]
PATENT ASSIGNEE(S): NEURONOVA AB, Fiskartorpsvagen15A-D, S-114 33 Stockholm, SE [SE, SE], for all designates States except US;
LINDQUIST, Per, Staltrtadsvagen 21, S-168 68 Bromma, SE [SE, SE], for US only;
MERCER, Alex, Staltradsvagen 15, S-168 68 Bromma, SE [SE, SE], for US only;
RONNHOLM, Harriet, Tornslingan 8, 1 tr, S-142 61 Trangsund, SE [SE, SE], for US only;
WIKSTROM, Lilian, Stjarnfallsvagen 9, S-163 54 Spanga, SE [SE, SE], for US only
AGENT: MACLEAN, Martin, Robert$, Mathys & Squire, 100 Gray's Inn Road, London WC1X 8AL$, GB
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2003094965	A2	20031120

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2003-IB2370 A 20030508
PRIORITY INFO.: US 2002-60/379,114 20020508
US 2002-60/393,159 20020702

ABEN The invention relates generally to methods of influencing central nervous system cells to produce progeny useful in the treatment of CNS disorders. More specifically, the invention includes methods of exposing a patient suffering from such a disorder to a reagent that modulates the proliferation, migration, differentiation and survival of central nervous system cells via S1P or LPA signaling. These methods are useful for reducing at least one symptom of the disorder.

ABFR L'invention concerne generalement des procedes permettant d'influencer les cellules du systeme nerveux central afin de produire des progeniteurs utiles dans le traitement de troubles du SNC. Elle concerne plus specifiquement des procedes d'exposition d'un patient souffrant d'un tel trouble a un reactif qui module la proliferation, la migration, la differentiation et la survie de cellules du systeme nerveux central via une signalisation S1P ou LPA. Ces procedes sont utiles afin de reduire au moins un symptome du trouble.

L33 ANSWER 7 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN

ACCESSION NUMBER: 2003092716 PCTFULL ED 20031118 EW 200346

TITLE (ENGLISH): THE FUNCTIONAL ROLE AND POTENTIAL THERAPEUTIC USE OF PACAP, VIP AND MAXADILAN IN RELATION TO ADULT NEURAL STEM OR PROGENITOR CELLS

TITLE (FRENCH): ROLE FONCTIONNEL ET UTILISATION THERAPEUTIQUE POTENTIELLE DE PACAP, VIP ET MAXADILAN EN RAPPORT AVEC DES CELLULES PROGENITRICES OU SOUCHES NEURONALES CHEZ L'ADULTE

INVENTOR(S): MERCER, Alex, Stalradsvagen 15, SE-168 68 Bromma, SE [SE, SE];
PATRONE, Cesare, Hagerstensvagen 11, SE-126 49 Hagersten, SE [SE, SE];
RONNHOLM, Harriet, Tornslingan 8, 1 tr., SE-142 61 Trangsund, SE [SE, SE];
WIKSTROM, Lilian, Stjarnfallsvagen 90, SE-163 54 Spanga, SE [SE, SE]

PATENT ASSIGNEE(S): NEURONOVA AB, Fiskartorpsvagen 15A-D, SE-114 33 Stockholm, SE [SE, SE], for all designates States except US;
MERCER, Alex, Stalradsvagen 15, SE-168 68 Bromma, SE [SE, SE], for US only;
PATRONE, Cesare, Hagerstensvagen 11, SE-126 49 Hagersten, SE [SE, SE], for US only;
RONNHOLM, Harriet, Tornslingan 8, 1 tr., SE-142 61 Trangsund, SE [SE, SE], for US only;
WIKSTROM, Lilian, Stjarnfallsvagen 90, SE-163 54 Spanga, SE [SE, SE], for US only

AGENT: MACLEAN, Martin, Robert$, Mathys & Squire, 100 Gray's Inn Road, London WC1X 8AL$, GB

LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2003092716	A2	20031113

DESIGNATED STATES

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

RW (EAPO): AM AZ BY KG KZ MD RU TJ TM

RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2003-IB2167 A 20030502

PRIORITY INFO.: US 2002-60/377,734 20020503
US 2002-60/393,264 20020702
US 2002-60/426,827 20021115

ABEN The invention relates generally to methods of influencing central nervous system cells to produce progeny useful in the treatment of CNS

disorders. More specifically, the invention includes methods of exposing a patient suffering from such a disorder to a reagent that modulates the proliferation, migration, differentiation and survival of central nervous system cells via PACAP, Maxadilan or VIP signaling. These methods are useful for reducing at least one symptom of the disorder.

ABFR L'invention concerne d'une maniere generale des procedes pour influencer les cellules du systeme nerveux central afin de produire une progeniture utile dans le traitement de troubles du SNC. Elle concerne plus particulierement des procedes pour exposer un patient souffrant d'un de ces troubles a un reactif qui module la proliferation, la migration, la differentiation et la survie des cellules du systeme nerveux central via la signalisation PACAP, Maxadilan ou VIP. Ces procedes sont utiles pour reduire au moins un symptome du trouble en question.

L33 ANSWER 8 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2003066120 PCTFULL ED 20030828 EW 200333
TITLE (ENGLISH): TREATING DEGENERATIVE DISC DISEASE THROUGH TRANSPLANTATION OF ALLOGRAFT DISC
TITLE (FRENCH): TRAITEMENT D'UNE MALADIE DEGENERATIVE DU DISQUE PAR TRANSPLANTATION D'UN DISQUE ALLOGREFFE
INVENTOR(S): FERREE, Bret, A., 1238 Cliff Laine Drive, Cincinnati, OH 45208, US [US, US]
PATENT ASSIGNEE(S): FERREE, Bret, A., 1238 Cliff Laine Drive, Cincinnati, OH 45208, US [US, US]
AGENT: LITZINGER, Jerrold, J.$, Sentron Medical, Inc., 4445 Lake Forest Drive, Suite 600, Cincinnati, OH 45242$, US
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2003066120	A1	20030814

DESIGNATED STATES
W: AU CA JP
RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
APPLICATION INFO.: WO 2002-US3123 A 20020204

ABEN The intervertebral disc and a portion of adjacent vertebrae obtained from recently deceased human or animal donors are used to restore disc function and eliminate pain in patients with disc disease. Cells harvested and cultured from the nucleus pulpsus and/or the annulus fibrosis of a normal disc are added to the donor disc. Additional therapeutic substances like culture medium, growth factors, differentiation factors, hydrogels polymers, antibiotics, anti-inflammatory medications, or immunosuppressive medications may also be added to the transplanted disc unit.

ABFR On utilise le disque intervertebral et une partie de vertebre contigue obtenue d'un donneur humain recemment decede ou d'un donneur animal pour restaurer la fonction du disque et eliminer les douleurs ressenties par des patients atteints d'une maladie du disque. Des cellules recueillies et cultivees du noyau gelatineux et/ou de l'anneau fibreux d'un disque normal sont ajoutees au disque du donneur. On peut aussi ajouter au disque transplante des substances therapeutiques additionnelles comme un milieu de culture, des facteurs de croissance, des facteurs de differentiation, des polymeres hydrogels, des antibiotiques, des medications anti-inflammatoires des medications immunodepressives.

L33 ANSWER 9 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2003047635 PCTFULL ED 20030620 EW 200324
TITLE (ENGLISH): USE OF CD34+ HEMATOPOIETIC PROGENITOR CELLS FOR THE TREATMENT OF CNS DISORDERS
TITLE (FRENCH): UTILISATION DES CELLULES HEMATOPOIETIQUES CD34+ DANS LE TRAITEMENT DES TROUBLES SNC
INVENTOR(S): CARTIER-LACAVE, Nathalie, 68, rue de Rivoli, F-75004 Paris, FR [FR, FR];
AUBOURG, Patrick, 96, rue Thiers, F-92100 Boulogne-Billancourt, FR [FR, FR];
ASHUEUR, Muriel, 1, rue Bauches, F-75016 Paris, FR [FR, FR];
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[FR, FR];
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PATENT ASSIGNEE(S): INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM), 101, rue de Tolbiac, F-75013 Paris, FR [FR, FR], for all designates States except US;
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AUBOURG, Patrick, 96, rue Thiers, F-92100 Boulogne-Billancourt, FR [FR, FR], for US only;
ASHUEUR, Muriel, 1, rue Bauches, F-75016 Paris, FR [FR, FR], for US only;
BENHAMIDA, Sonia, 22, rue Bonaparte, F-75006 Paris, FR [FR, FR], for US only;
PFLUMIO, Francoise, 47, voie Houdon, F-94400 Vitry sur Seine, FR [FR, FR], for US only

AGENT: MARTIN, Jean-Jacques$, Cabinet Regimbeau, 20, rue de Chazelles, F-75847 Paris Cedex 17$, FR

LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2003047635	A1	20030612

DESIGNATED STATES

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

RW (EAPO): AM AZ BY KG KZ MD RU TJ TM

RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SI SK TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2002-IB5698 A 20021206
PRIORITY INFO.: US 2001-60/337,078 20011206

ABEN The present invention provides novel methods for delivering cells, particularly modified

cells, to the central nervous system (CNS). The purpose of this invention is to

present a method that provides sustained delivery of a molecule to the central nervous

system, thereby increasing the bioavailability of the molecule and lengthening

the possible duration of treatment.

ABFR L'invention se rapporte a de nouvelles methodes d'administration de

cellules, notamment des cellules modifiees, au systeme nerveux central

(SNC). L'invention repose sur une methode qui assure une administration

reguliere d'une molecule au systeme nerveux central,

ce qui permet d'augmenter la biodisponibilite de la molecule

et d'allonger la duree possible du traitement.

L33 ANSWER 10 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2003039575 PCTFULL ED 20030520 EW 200320
TITLE (ENGLISH): THE FUNCTIONAL ROLE AND POTENTIAL THERAPEUTIC USE OF REELIN, GAS6 AND PROTEIN S IN RELATION TO ADULT NEURAL STEM OR PROGENITOR CELLS
TITLE (FRENCH): ROLE FONCTIONNEL ET UTILISATION THERAPEUTIQUE POTENTIELLE DE PROTEINES S, GAS6 ET REELIN EN RELATION AVEC DES CELLULES SOUCHES NEURONALES ADULTES

INVENTOR(S): BERTILSSON, Goran, Grasnvagen 5, S-137 41 Vasterhaninge, SE [SE, SE];
FRISEN, Jonas, Brahegatan 19, S-114 37 Stockholm, SE [SE, SE];
FALK, Anna, Gustav III:s Boulevard 3, S-169 72 Solna, SE [SE, SE];
HEIDRICH, Jessica, Bolmensvaegen 12, S-120 50 Arsta, SE [SE, SE];
HELLSTROM, Kristina, Erikhaellsgatan 81, S-151 46 Sodertaelje, SE [SE, SE];
KORTESMAA, Jarkko, Fatburs Brunnsgatan 27, S-118 28 Stockholm, SE [FI, SE];
LINDQUIST, Per, Staltradsvaegen 21, S-168 68 Bromma, SE [SE, SE];
LUNDH, Hanna, Tunvaegen 13, S-170 68 Solna, SE [SE, SE];
MCGUIRE, Jaccqueline, Stationsvaegen 45, S-141 40 Huddinge, SE [GB, SE];
MERCER, Alex, Staltradsvaegen 15, S-168 68 Bromma, SE [GB, SE];
PATRONE, Cesare, Haegerstensvaegen 111, S-126 49 Hagersten, SE [IT, SE];
RONNHOLM, Harriet, Tornslingan 8, 1 tr., S-142 61 Trangsund, SE [FI, SE];
WIKSTROM, Lilian, Stjaernfallsvaegen 9, S-163 54 Spanga, SE [FI, SE];
ZACHRISSON, Olof, Kaelvestavaegen 65, S-163 54 Spanga, SE [SE, SE]

PATENT ASSIGNEE(S): NEURONOVA AB, Fiskartorpsvagen 15A-D, S-114 33 Stockholm, SE [SE, SE], for all designates States except US;
BERTILSSON, Goran, Grasnvagen 5, S-137 41 Vasterhaninge, SE [SE, SE], for US only;
FRISEN, Jonas, Brahegatan 19, S-114 37 Stockholm, SE [SE, SE], for US only;
FALK, Anna, Gustav III:s Boulevard 3, S-169 72 Solna, SE [SE, SE], for US only;
HEIDRICH, Jessica, Bolmensvaegen 12, S-120 50 Arsta, SE [SE, SE], for US only;
HELLSTROM, Kristina, Erikhaellsgatan 81, S-151 46 Sodertaelje, SE [SE, SE], for US only;
KORTESMAA, Jarkko, Fatburs Brunnsgatan 27, S-118 28 Stockholm, SE [FI, SE], for US only;
LINDQUIST, Per, Staltradsvaegen 21, S-168 68 Bromma, SE [SE, SE], for US only;
LUNDH, Hanna, Tunvaegen 13, S-170 68 Solna, SE [SE, SE], for US only;
MCGUIRE, Jaccqueline, Stationsvaegen 45, S-141 40 Huddinge, SE [GB, SE], for US only;
MERCER, Alex, Staltradsvaegen 15, S-168 68 Bromma, SE [GB, SE], for US only;
PATRONE, Cesare, Haegerstensvaegen 111, S-126 49 Hagersten, SE [IT, SE], for US only;
RONNHOLM, Harriet, Tornslingan 8, 1 tr., S-142 61 Trangsund, SE [FI, SE], for US only;
WIKSTROM, Lilian, Stjaernfallsvaegen 9, S-163 54 Spanga, SE [FI, SE], for US only;
ZACHRISSON, Olof, Kaelvestavaegen 65, S-163 54 Spanga, SE [SE, SE], for US only

AGENT: MACLEAN, Martin, Robert$, Mathys & Squire, 100 Gray's Inn Road, London WC1X 8AL$, GB

LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2003039575	A2	20030515

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID

IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD
MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG
SI SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM
ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC
NL PT SE SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2002-GB5078 A 20021111
PRIORITY INFO.: US 2001-60/344,725 20011109
US 2001-60/345,064 20011109
US 2002-60/393,263 20020702
US 2002-60/394,397 20020708

ABEN The invention relates generally to methods of influencing central nervous system
cells to produce progeny useful in the treatment of CNS disorders. More specifically,
the invention includes methods of exposing a patient suffering from such a disorder
to reagent that modulates the proliferation, migration, differentiation and
survival of central nervous system cells via Reelin, Gas6 or Protein S signaling.
These methods are useful for reducing at least one symptom of the disorder.

ABFR L'invention concerne de maniere generale des procedes
destines a influencer des cellules du systeme nerveux central
afin d'obtenir une descendance utile dans le traitement des troubles du SNC. Plus particulierement, l'invention comprend des procedes
destines a exposer un patient souffrant dudit trouble a un reactif
qui module la proliferation, la migration, la differentiation et
la survie des cellules du systeme nerveux central par l'intermediaire
d'une signalisation de proteines Reelin, Gas6 ou S. Ces procedes
sont utiles pour reduire au moins un symptome dudit trouble.

L33 ANSWER 11 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2003014317 PCTFULL ED 20030303 EW 200308
TITLE (ENGLISH): COMPOSITIONS AND METHODS FOR ISOLATION, PROPAGATION, AND DIFFERENTIATION OF HUMAN STEM CELLS AND USES THEREOF
TITLE (FRENCH): COMPOSITIONS ET PROCEDES PERMETTANT D'ISOLER DE FAIRE PROLIFERER ET DE DIFFERENCIER DES CELLULES-SOUCHES HUMAINES ET UTILISATION DE CELLES-CI
INVENTOR(S): NEUMAN, Toomas, 209 Montana Avenue, Apt # 201, Santa Monica, CA 90403, US;
LEVESQUE, Michel, 457 South Camden Drive, Beverly Hills, CA 90212, US
PATENT ASSIGNEE(S): CELMED BIOSCIENCES USA, 110 George Burns Road, Suite 4090, Los Angeles, CA 90048, US [US, US]
AGENT: ALTMAN, Daniel, E.$, Knobbe, Martens, Olson & Bear, LLP, 2040 Main Street, Fourteenth Floor, Irvine, CA 92614$, US
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2003014317	A2	20030220

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR
CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID
IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD
MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC
NL PT SE SK TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2002-US25191 A 20020808
PRIORITY INFO.: US 2001-60/310,727 20010808
US 2001-60/312,714 20010816

ABEN The invention is directed to the field of human stem cells and includes methods and compositions for isolating, propagating, and differentiating human stem cells. The invention provides therapeutic uses of the methods and compositions, including autologous transplantation of treated cells into humans for treatment of Parkinson's and other neuronal disorders.

ABFR Cette invention, qui releve du domaine des cellules-souches humaines, a trait a des procedes et aux compositions afferentes permettant d'isoler, de faire proliferer et de differencier des cellules-souches humaines. Elle porte egalement sur des utilisations therapeutiques de ces compositions et des procedes susmentionnes, notamment en matiere de transplantation autologue de cellules traitees chez des patients humains aux fins du traitement de la maladie de Parkinson et d'autres troubles neuronaux.

L33 ANSWER 12 OF 63 USPATFULL on STN
ACCESSION NUMBER: 2003:172722 USPATFULL
TITLE: Compositions and methods for isolation, propagation, and differentiation of human stem cells and uses thereof
INVENTOR(S): Neuman, Toomas, Santa Monica, CA, UNITED STATES
Levesque, Michel, Beverly Hills, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003118566	A1	20030626
APPLICATION INFO.:	US 2002-216677	A1	20020808 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-310727P	20010808 (60)
	US 2001-312714P	20010816 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
LINE COUNT: 1836

AB The invention is directed to the field of human stem cells and includes methods and compositions for isolating, propagating, and differentiating human stem cells. The invention provides therapeutic uses of the methods and compositions, including autologous transplantation of treated cells into humans for treatment of Parkinson's and other neuronal disorders.

L33 ANSWER 13 OF 63 USPATFULL on STN
ACCESSION NUMBER: 2003:279262 USPATFULL
TITLE: Nuclear transfer using cells cultured in serum starvation media containing apoptosis inhibitors
INVENTOR(S): Piedrahita, Jorge A., College Station, TX, United States
Lee, Chang-Kyu, Suwon, KOREA, REPUBLIC OF
Weaks, Regina, Richardson, TX, United States
Bazer, Fuller, College Station, TX, United States
PATENT ASSIGNEE(S): The Texas A&M University System, College Station, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6635802	B1	20031021
APPLICATION INFO.:	US 2001-758024		20010110 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-175196P	20000110 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Crouch, Deborah

LEGAL REPRESENTATIVE: Bracewell & Patterson LLP
NUMBER OF CLAIMS: 60
EXEMPLARY CLAIM: 58
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 2868
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are methods and compositions for increasing the efficiency of nuclear transfer using apoptosis inhibitors, and for the production of transgenic and non-transgenic mammals from cultured cells or cell lines. Methods for cloning mammals, and for producing transgenic and chimeric mammalian tissues and mammals, and chimeric cell lines are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 14 OF 63 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 2003421710 EMBASE
TITLE: Engraftment and tumor formation after allogeneic in utero transplantation of primate embryonic stem cells.
AUTHOR: Asano T.; Ageyama N.; Takeuchi K.; Momoeda M.; Kitano Y.; Sasaki K.; Ueda Y.; Suzuki Y.; Kondo Y.; Torii R.; Hasegawa M.; Ookawara S.; Harii K.; Terao K.; Ozawa K.; Hanazono Y.
CORPORATE SOURCE: Dr. Y. Hanazono, Division of Regenerative Medicine, Center for Molecular Medicine, Jichi Medical School, 3311-1 Yakushiji, Kawachi, Tochigi 329-0498, Japan. hanazono@jichi.ac.jp
SOURCE: Transplantation, (15 Oct 2003) 76/7 (1061-1067). Refs: 27
ISSN: 0041-1337 CODEN: TRPLAU
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 025 Hematology
026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Background. To achieve human embryonic stem (ES) cell-based **transplantation** therapies, allogeneic **transplantation** models of nonhuman primates would be useful. We have prepared cynomolgus ES cells genetically marked with the green fluorescent protein (GFP). The cells were **transplanted** into the allogeneic fetus, taking advantage of the fact that the fetus is so immunologically immature as not to induce immune responses to **transplanted** cells and that **fetal tissue** compartments are rapidly expanding and thus providing space for the engraftment. Methods. Cynomolgus ES cells were genetically modified to express the GFP gene using a simian immunodeficiency viral vector or electroporation. These cells were **transplanted** in **utero** with ultrasound guidance into the cynomolgus fetus in the abdominal cavity (n=2) or liver (n=2) at the end of the first trimester. Three fetuses were delivered 1 month after **transplantation**, and the other, 3 months after **transplantation**. Fetal tissues were examined for **transplanted** cell progeny by quantitative polymerase chain reaction and in situ polymerase chain reaction of the GFP sequence. Results. A fluorescent tumor, obviously derived from **transplanted** ES cells, was found in the thoracic cavity at 3 months after **transplantation** in one fetus. However, **transplanted** cell progeny were also detected (- 1%) without teratomas in multiple **fetal tissues**. The cells were solitary and indistinguishable from surrounding host cells. Conclusions. **Transplanted** cynomolgus ES cells can be engrafted in allogeneic fetuses. The cells will, however, form a tumor if they "leak" into an improper space **such** as the thoracic cavity.

L33 ANSWER 15 OF 63 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 1
ACCESSION NUMBER: 2003464769 EMBASE
TITLE: Staging and Preparation of Human Fetal Striatal Tissue for Neural Transplantation in Huntington's Disease.
AUTHOR: Rosser A.E.; Barker R.A.; Armstrong R.J.E.; Elneil S.; Jain M.; Hurelbrink C.B.; Prentice A.; Carne C.; Thornton S.;

Hutchinson H.; Dunnett S.B.
CORPORATE SOURCE: A.E. Rosser, School of Biosciences, Cardiff University, Museum Avenue, Cardiff CF10 3US, United Kingdom. RosserAE@cf.ac.uk
SOURCE: Cell Transplantation, (2003) 12/7 (679-686).
Refs: 38
ISSN: 0963-6897 CODEN: CTRAE8
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 001 Anatomy, Anthropology, Embryology and Histology
008 Neurology and Neurosurgery
021 Developmental Biology and Teratology
LANGUAGE: English
SUMMARY LANGUAGE: English

AB **Transplantation** of human fetal central nervous system tissue has been shown to be of benefit in Parkinson's disease, and is currently being explored as a therapeutic option in Huntington's disease. The **success** of a neural **transplant** is dependent on a number of factors, including the requirement that **donor** cells are harvested within a given developmental window and that the cell preparation protocols take account of the biological parameters identified in animal models. Although many of the criteria necessary for a **successful** neural **transplant** have been defined in animal models, ultimately they must be validated in human studies, and some issues can only ever be addressed in human studies. Furthermore, because neural **transplantation** of human **fetal tissue** is limited to small numbers of patients in any one surgical center, largely due to practical constraints, it is crucial that tissue preparation protocols are clearly defined and reproducible, so that (i) multicenter trials are possible and are based on consistent tissue preparation parameters, and (ii) results between centers can be meaningfully analyzed. Here we describe the preparation of human fetal striatum for neural **transplantation** in Huntington's disease, and report on the validation of a method for estimating the developmental stage of the fetus based on direct morphometric measurements of the embryonic tissue.

L33 ANSWER 16 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2002051997 PCTFULL ED 20020716 EW 200227
TITLE (ENGLISH): METHODS FOR CLONING MAMMALS USING REPROGRAMMED DONOR CHROMATIN OR DONOR CELLS
TITLE (FRENCH): METHODES DE CLONAGE DE MAMMIFERES A L'AIDE DE CHROMATINE DONNEUSE REPROGRAMMEE OU DE CELLULES DONNEUSES REPROGRAMMEES
INVENTOR(S): COLLAS, Philippe, Nygaardsalle 4A, N-0871 Oslo, NO [FR, NO];
ROBL, James, M., 196 Old Enfield Road, Belchertown, MA 01007, US [US, US];
SULLIVAN, Eddie, 2937 Dimrill Stair, Manhattan, KS 66503, US [US, US];
KASINATHAN, P., 1540 Waterford Place #1, Manhattan, KS 66502, US [LK, US]
PATENT ASSIGNEE(S): AUROX LLC, 33 Riverside Avenue, 2nd Floor, Westport, CT 06880, US [US, US], for all designates States except US;
COLLAS, Philippe, Nygaardsalle 4A, N-0871 Oslo, NO [FR, NO], for US only;
ROBL, James, M., 196 Old Enfield Road, Belchertown, MA 01007, US [US, US], for US only;
SULLIVAN, Eddie, 2937 Dimrill Stair, Manhattan, KS 66503, US [US, US], for US only;
KASINATHAN, P., 1540 Waterford Place #1, Manhattan, KS 66502, US [LK, US], for US only
AGENT: ELBING, Karen, L.$, Clark & Elbing LLP, 176 Federal Street, Boston, MA 02110-2214$, US
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE

	WO 2002051997 A1 20020704
DESIGNATED STATES	
W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
RW (ARIPO):	GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO):	AM AZ BY KG KZ MD RU TJ TM
RW (EPO):	AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
RW (OAPI):	BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
APPLICATION INFO.:	WO 2001-US50406 A 20011221
PRIORITY INFO.:	US 2000-60/258,151 20001222

ABEN The invention provides methods for cloning mammals that allow the donor chromosomes or donor cells to be reprogrammed prior to insertion into an enucleated oocyte. The invention also features methods of inserting chromosomes or nuclei into recipient cells.

ABFR La presente invention concerne des methodes de clonage de mammiferes permettant la reprogrammation de cellules donneuses ou de chromosomes donneurs avant leur introduction dans un ovocyte enuclee. Cette invention concerne egalement des procedes permettant d'introduire des chromosomes ou des noyaux dans des cellules receptrices.

L33 ANSWER 17 OF 63 USPATFULL on STN

ACCESSION NUMBER:	2002:75643 USPATFULL
TITLE:	Methods comprising apoptosis inhibitors for the generation of transgenic pigs
INVENTOR(S):	Piedrahita, Jorge A., College Station, TX, United States Bazer, Fuller W., College Station, TX, United States
PATENT ASSIGNEE(S):	Texas A&M University System, College Station, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6369294	B1	20020409
	US 2002045253	A1	20020418
APPLICATION INFO.:	US 2001-819964		20010328 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-949155, filed on 10 Oct 1997, now patented, Pat. No. US 6271436		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-46094P	19970509 (60)
	US 1996-27338P	19961011 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Crouch, Deborah
ASSISTANT EXAMINER:	Pappu, Sita
LEGAL REPRESENTATIVE:	Bracewell & Patterson L.L.P.
NUMBER OF CLAIMS:	58
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT:	9398

AB Disclosed are methods for the isolation of primordial germ cells, culturing these cells to produce primordial germ cell-derived cell lines, methods for transforming both the primordial germ cells and the cultured cell lines, and using these transformed cells and cell lines to generate transgenic animals. The efficiency at which transgenic animals are generated by the present invention is greatly increased, thereby allowing the use of homologous recombination in producing transgenic non-rodent animal species.

L33 ANSWER 18 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN

ACCESSION NUMBER:	2001062891 PCTFULL ED 20020822
TITLE (ENGLISH):	207 HUMAN SECRETED PROTEINS
TITLE (FRENCH):	207 PROTEINES HUMAINES SECRETEES
INVENTOR(S):	NI, Jian; EBNER, Reinhard;

LAFLEUR, David, W.;
MOORE, Paul, A.;
OLSEN, Henrik, S.;
ROSEN, Craig, A.;
RUBEN, Steven, M.;
SOPPET, Daniel, R.;
YOUNG, Paul, E.;
SHI, Yanggu;
FLORENCE, Kimberly, A.;
WEI, Ying-Fei;
FLORENCE, Charles;
HU, Jing-Shan;
LI, Yi;
KYAW, Hla;
FISCHER, Carrie, L.;
FERRIE, Ann, M.;
FAN, Ping;
FENG, Ping;
ENDRESS, Gregory, A.;
DILLON, Patrick, J.;
CARTER, Kennith, C.;
BREWER, Laurie, A.;
YU, Guo-Liang;
ZENG, Zhizhen;
GREENE, John, M.

PATENT ASSIGNEE(S): HUMAN GENOME SCIENCES, INC.;
NI, Jian;
EBNER, Reinhard;
LAFLEUR, David, W.;
MOORE, Paul, A.;
OLSEN, Henrik, S.;
ROSEN, Craig, A.;
RUBEN, Steven, M.;
SOPPET, Daniel, R.;
YOUNG, Paul, E.;
SHI, Yanggu;
FLORENCE, Kimberly, A.;
WEI, Ying-Fei;
FLORENCE, Charles;
HU, Jing-Shan;
LI, Yi;
KYAW, Hla;
FISCHER, Carrie, L.;
FERRIE, Ann, M.;
FAN, Ping;
FENG, Ping;
ENDRESS, Gregory, A.;
DILLON, Patrick, J.;
CARTER, Kennith, C.;
BREWER, Laurie, A.;
YU, Guo-Liang;
ZENG, Zhizhen;
GREENE, John, M.

DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001062891	A2	20010830

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD
SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY
DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF
CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.:	WO 2001-US5614	A	20010221
PRIORITY INFO.:	US 2000-60/184,836		20000224
	US 2000-60/193,170		20000329

ABEN The present invention relates to the novel human secreted proteins and

isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

ABFR La presente invention concerne de nouvelles proteines humaines secretees ainsi que des acides nucleiques isoles contenant les regions codantes des genes codant ces proteines. L'invention concerne egalement des vecteurs, des cellules hotes, des anticorps ainsi que des methodes de recombinaison permettant la production de proteines humaines secretees. L'invention concerne egalement des methodes de diagnostic et therapeutiques utiles pour diagnostiquer et traiter des maladies, des troubles et/ou des etats lies a ces nouvelles proteines humaines secretees.

L33 ANSWER 19 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2001057191 PCTFULL ED 20020827
TITLE (ENGLISH): GENERATION OF DOPAMINERGIC NEURONS FROM HUMAN NERVOUS SYSTEM STEM CELLS
TITLE (FRENCH): PRODUCTION DE NEURONES DOPAMINERGIQUES A PARTIR DE CELLULES SOUCHES DU SYSTEME NERVEUX HUMAIN
INVENTOR(S): ZOBEL, Rita;
LEVESQUE, Michel, F.
PATENT ASSIGNEE(S): NEUROGENERATION, INC.
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001057191	A1	20010809

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ CZ DE DE DK DK DM DZ EE EE ES FI FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2001-US1564 A 20010116
PRIORITY INFO.: US 2000-09/490,569 20000201

ABEN The present invention relates to methods for generating dopaminergic neurons in vitro from embryonic and adult central nervous system cells. Specifically, these cells are isolated, cultured in vitro and stimulated to differentiate into dopaminergic neurons by down-regulating COUP-TFI and/or COUP-TFII expression or increasing NOT1 expression. These newly generated dopaminergic neurons may serve as an excellent source for cell replacement therapy in neurological disorders in which the dopaminergic system is compromised.

ABFR Methodes permettant de produire des neurones dopaminergiques in vitro a partir de cellules souches du systeme nerveux central adulte et embryonnaire. Specifiquement, ces cellules sont isolees, cultivees in vitro et stimulees pour se differencier en neurones dopaminergiques par regulation a la baisse de l'expression de COUP-TFI et/ou de COUP-TFII ou par augmentation de l'expression de NOT1. Ces neurones dopaminergiques nouvellement produits peuvent constituer une excellente source pour la therapie de remplacement cellulaire dans des troubles neurologiques dans lesquels le systeme dopaminergique est atteint.

L33 ANSWER 20 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2001053331 PCTFULL ED 20020827
TITLE (ENGLISH): PEPTIDOMIMETIC MODULATORS OF CELL ADHESION
TITLE (FRENCH): MODULATEURS PEPTIDOMIMETIQUES DE L'ADHESION CELLULAIRE
INVENTOR(S): GOUR, Barbara, J.;
BLASCHUK, Orest, W.;
ALI, Anmar;
NI, Feng;
CHEN, Zhigang;
MICHAUD, Stephanie, Denise;
WANG, Shoameng;
HU, Zengjian

PATENT ASSIGNEE(S): ADHEREX TECHNOLOGIES, INC.;
GOUR, Barbara, J.;
BLASCHUK, Orest, W.;
ALI, Anmar;
NI, Feng;
CHEN, Zhigang;
MICHAUD, Stephanie, Denise;
WANG, Shoameng;
HU, Zengjian
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001053331	A2	20010726

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD
SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY
DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF
CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2001-US2508 A 20010124
PRIORITY INFO.: US 2000-09/491,078 20000124
ABEN Peptidomimetics of cyclic peptides, and compositions comprising such peptidomimetics are provided. The peptidomimetics have a three-dimensional structure that is substantially similar to a three-dimensional structure of a cyclic peptide that comprises a cadherin cell adhesion recognition sequence HAV. Methods for using such peptidomimetics for modulating cadherin-mediated cell adhesion in a variety of contexts are also provided.
ABFR L'invention concerne des peptidomimetiques de peptides cycliques ainsi que des compositions contenant ces peptidomimetiques. Les peptidomimetiques ont une structure tridimensionnelle sensiblement similaire a une structure tridimensionnelle d'un peptide cyclique contenant une sequence HAV de reconnaissance d'adhesion cellulaire mediee par cadherine. L'invention concerne egalement des methodes d'utilisation de ces peptidomimetiques pour moduler l'adhesion cellulaire mediee par cadherine dans une variete de contextes.

L33 ANSWER 21 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2001047946 PCTFULL ED 20020827
TITLE (ENGLISH): GFRa1-RET SPECIFIC AGONISTS AND METHODS THEREFOR
TITLE (FRENCH): AGONISTES SPECIFIQUES POUR GRF$G(A)1-RET ET PROCEDES CORRESPONDANTS
INVENTOR(S): MILBRANDT, Jeffrey, D.;
BALOH, Robert, H.
PATENT ASSIGNEE(S): WASHINGTON UNIVERSITY;
MILBRANDT, Jeffrey, D.;
BALOH, Robert, H.
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001047946	A2	20010705

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD
SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY
DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF
CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2000-US34852 A 20001221
PRIORITY INFO.: US 1999-09/473,551 19991228
ABEN Chimeric GDNF family ligands which activate a GFRa/RET are disclosed. Included are chimeras which activate GFRa1/RET but do not activate GFRa2-RET or GFRa3-RET. The chimeras are useful in providing trophic support to a mammalian cell or in producing differentiation of a

mammalian cell, or both, particularly when the cell is in a patient suffering from various diseases, in particular Parkinson's Disease.

ABFR L'invention concerne des ligands chimeres de la famille GDNF activant un GFRa/RET. Elle englobe des chimeres activant GRFa1/RET mais n'activant pas GFRa2-RET ou GRFa3-RET. Ces chimeres sont utiles pour apporter un support trophique a une cellule mammifere ou pour produire une differenciation de cellules mammiferes, ou les deux, en particulier quand la cellule appartient a un patient atteint de differentes maladies, en particulier, la maladie de Parkinson.

L33 ANSWER 22 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2001042451 PCTFULL ED 20020827
TITLE (ENGLISH): FULL-LENGTH HUMAN cDNAs ENCODING POTENTIALLY SECRETED PROTEINS
TITLE (FRENCH): ADNc HUMAINS PLEINE LONGUEUR CODANT POUR DES PROTEINES POTENTIELLEMENT SECRETEES
INVENTOR(S): DUMAS MILNE EDWARDS, Jean-Baptiste;
BOUGUELERET, Lydie;
JOBERT, Severin
PATENT ASSIGNEE(S): GENSET;
DUMAS MILNE EDWARDS, Jean-Baptiste;
BOUGUELERET, Lydie;
JOBERT, Severin
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001042451	A2	20010614

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2000-IB1938 A 20001207
PRIORITY INFO.: US 1999-60/169,629 19991208
US 2000-60/187,470 20000306

ABEN The invention concerns GENSET polynucleotides and polypeptides. Such GENSET products may be used as reagents in forensic analyses, as chromosome markers, as tissue/cell/organelle-specific markers, in the production of expression vectors. In addition, they may be used in screening and diagnosis assays for abnormal GENSET expression and/or biological activity and for screening compounds that may be used in the treatment of GENSET-related disorders.

ABFR L'invention concerne des polynucleotides et des polypeptides GENSET. Ces produits GENSET peuvent s'utiliser comme reactifs dans des analyses judiciaires, en tant que marqueurs chromosomiques, comme marqueurs specifiques a un tissu/cellule/organite, dans la production de vecteurs d'expression. En outre, ils peuvent s'utiliser dans des dosages de criblage et diagnostiques d'une expression GENSET et/ou une activite biologique anormales ainsi que pour le criblage de composes pouvant etre utilises dans le traitement de troubles lies a GENSET.

L33 ANSWER 23 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2001030981 PCTFULL ED 20020820
TITLE (ENGLISH): CULTURES OF GFAP?+¿ NESTIN?+¿ CELLS THAT DIFFERENTIATE TO NEURONS
TITLE (FRENCH): CULTURES DE CELLULES GFAP?+¿ NESTIN?+¿ SE DIFFERENCIANT EN NEURONES
INVENTOR(S): WAHLBERG, Lars;
CAMPBELL, Kenneth;
FAGERSTROM, Charlotta;
ERIKSSON, Cecilia;
WICTORIN, Klas
PATENT ASSIGNEE(S): NS GENE A/S;
WAHLBERG, Lars;
CAMPBELL, Kenneth;
FAGERSTROM, Charlotta;

ERIKSSON, Cecilia;
WICTORIN, Klas

DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001030981	A1	20010503

DESIGNATED STATES

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2000-IB1669 A 20001025

PRIORITY INFO.: US 1999-60/161,316 19991025
US 2000-60/161,316 20001024

ABEN Cultures of cells immunoreactive for glial fibrillary acidic protein (GFAP), as well as for the intermediate filament marker nestin were grown in a medium including epidermal growth factor (EGF) and serum. The cultured cells had the morphology of astroglial cells. The cells can be proliferated in adherent or suspension cultures. Depending on the culture conditions, the cells can be induced to differentiate to neurons or glial cells. The cultures can be expanded over a large number of passages during several months, and survive, express an astroglial phenotype and integrate well after transplantation into both neonatal and adult rat forebrain.

ABFR

L33 ANSWER 24 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN

ACCESSION NUMBER: 2001022978 PCTFULL ED 20020820

TITLE (ENGLISH): AUTOLOGOUS MARROW STEM CELL (MSC) TRANSPLANTATION FOR MYOCARDIAL REGENERATION

TITLE (FRENCH): TRANSPLANTATION DE CELLULES SOUCHES (MSC) DE MOELLE OSSEUSE AUTOLOGUES EN VUE DE LA REGENERATION MYOCARDIQUE

INVENTOR(S): CHIU, Ray, C., J.;
SHUM-TIM, Dominique;
GALIPEAU, Jacques

PATENT ASSIGNEE(S): MCGILL UNIVERSITY;
CHIU, Ray, C., J.;
SHUM-TIM, Dominique;
GALIPEAU, Jacques

DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001022978	A2	20010405

DESIGNATED STATES

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2000-CA1114 A 20000928

PRIORITY INFO.: US 1999-60/156,700 19990930

ABEN The present invention relates to a method of improving cardiac function in a patient with heart failure without eliciting an immune response and without sacrificing the patient's skeletal muscle; which comprises the step of transplanting autologous bone marrow stroma cells (MSCs) into said patient's myocardium to grow new muscle fibers. The method may further comprise the step of using cell labeling technique to confirm survival and differentiation of implanted MSCs, and to identify said MSCs phenotype by both morphology and molecular markers. The method may further comprise examining the effects of the micro-environment of implanted MSCs on their differentiation and phenotype expression. The

method may further comprise examining functional contribution of MSCs implanted into an ischemic segment of the myocardium.

ABFR

L33 ANSWER 25 OF 63 USPATFULL on STN

ACCESSION NUMBER:	2001:126193 USPATFULL
TITLE:	Cells and methods for the generation of transgenic pigs
INVENTOR(S):	Piedrahita, Jorge A., College Station, TX, United States Bazer, Fuller W., College Station, TX, United States
PATENT ASSIGNEE(S):	The Texas A & M University System, College Station, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6271436	B1	20010807	
APPLICATION INFO.:	US 1997-949155		19971010	(8)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1996-27338P	19961011	(60)
	US 1997-46094P	19970509	(60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Martin, Jill D.
LEGAL REPRESENTATIVE:	Williams, Morgan & Amerson
NUMBER OF CLAIMS:	69
EXEMPLARY CLAIM:	55
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT:	8905

AB Disclosed are methods for the isolation of primordial germ cells, culturing these cells to produce primordial germ cell-derived cell lines, methods for transforming both the primordial germ cells and the cultured cell lines, and using these transformed cells and cell lines to generate transgenic animals. The efficiency at which transgenic animals are generated by the present invention is greatly increased, thereby allowing the use of homologous recombination in producing transgenic non-rodent animal species.

L33 ANSWER 26 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN

ACCESSION NUMBER:	2000018799 PCTFULL ED 20020515
TITLE (ENGLISH):	ARTEMIN, A NOVEL NEUROTROPHIC FACTOR
TITLE (FRENCH):	L'ARTEMINE, UN NOUVEAU FACTEUR NEUROTROPHIQUE
INVENTOR(S):	MILBRANDT, Jeffrey, D.; BALOH, Robert, H.
PATENT ASSIGNEE(S):	WASHINGTON UNIVERSITY; MILBRANDT, Jeffrey, D.; BALOH, Robert, H.
LANGUAGE OF PUBL.:	English
DOCUMENT TYPE:	Patent

PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2000018799	A1	20000406

DESIGNATED STATES

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.:	WO 1999-US22604	A	19990929
PRIORITY INFO.:	US 1998-09/163,283		19980929
	US 1998-60/108,148		19981112
	US 1998-09/218,698		19981222

ABEN A novel growth factor, artemin, which belongs to the GDNF/neurturin/persephin family of growth factors, is disclosed. The human and mouse amino sequences have been

identified. Human and mouse
artemin genomic DNA sequences have been cloned and sequenced and the respective cDNA sequences
identified. In addition, methods for treating degenerative conditions using artemin, methods for
detecting artemin gene alterations and methods for detecting and monitoring patient levels of
artemin are provided.

ABFR L'invention concerne un nouveau facteur de croissance, l'artemine, qui appartient a la famille
des facteurs de croissance GDNF/neurturine/persephine. Les sequences amino humaines et murines ont
ete identifiees. Les sequences de l'ADN genomique de l'artemine humaine et murine ont ete clonees et
sequencees, et l'on a identifie les sequences d'ADNc respectives. L'invention concerne egalement des
procedes relatifs au traitement des etats degeneratifs par le biais de l'artemine, ainsi que des
procedes relatifs a la detection des alterations du gene de l'artemine et des procedes relatifs a la
detection et au controle des niveaux d'artemine chez les patients.

L33 ANSWER 27 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 2000002917 PCTFULL ED 20020515
TITLE (ENGLISH): COMPOUNDS AND METHODS FOR MODULATING CADHERIN-MEDIATED FUNCTIONS
TITLE (FRENCH): COMPOSES PERMETTANT DE MODULER DES FONCTIONS INDUITES PAR LA CADHERINE ET TECHNIQUES AFFERENTES
INVENTOR(S): DOHERTY, Patrick;
BLASCHUK, Orest, W.;
GOUR, Barbara, J.
PATENT ASSIGNEE(S): ADHEREX TECHNOLOGIES, INC.;
DOHERTY, Patrick;
BLASCHUK, Orest, W.;
GOUR, Barbara, J.
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2000002917	A2	20000120

DESIGNATED STATES
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 1999-CA627 A 19990712
PRIORITY INFO.: US 1998-09/113,977 19980710

ABEN Modulating agents and methods for enhancing or inhibiting cadherin-mediated functions are
provided. The modulating agents comprise at least an HAV binding motif, an analogue or
peptidomimetic thereof, or an antibody or fragment thereof that specifically binds to such a motif.
Modulating agents may additionally comprise one or more cell adhesion recognition sequences
recognized by cadherins and/or other adhesion molecules. Such modulating agents may, but need not,
be linked to a targeting agent, drug and/or support material.

ABFR Cette invention a trait a des agents de modulation et aux techniques afferentes renforcant ou
inhibant des fonctions lies a la cadherine. Ces agents de modulation comportent au moins un motif de
reconnaissance d'adhesion a HAV (His-Ala-Val), un analogue ou un peptidomimetique de celui-ci ou un
anticorps ou un fragment de celui-ci se liant de maniere specifique a ce motif. Les agents de

modulation peuvent, de surcroit, comporter une ou plusieurs sequences de reconnaissance d'adhesion
cellulaire reconnues par des cadherines et/ou d'autres molecules d'adhesion. Ils peuvent, sans pour
autant y etre contraints, etre lies a un agent de ciblage, a un medicament et/ou a un materiau
support.

L33 ANSWER 28 OF 63 USPATFULL on STN
ACCESSION NUMBER: 2000:105411 USPATFULL
TITLE: Genetically engineered cells that produce produce L. Dopa
INVENTOR(S): Kang, Un Jung, Northbrook, IL, United States
Gage, Fred H., La Jolla, CA, United States
PATENT ASSIGNEE(S): Arch Development Corporation, Chicago, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6103226		20000815
APPLICATION INFO.:	US 1994-290028		19940812 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: LeGuyader, John I.
ASSISTANT EXAMINER: McGarry, Sean
LEGAL REPRESENTATIVE: Rockey, Milnamow & Katz, Ltd.
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 1247
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a process of increasing dopamine production in a cell comprising co-transfecting the cell with one or more expression vectors containing polynucleotides that encode tyrosine hydroxylase, aromatic L-amino acid decarboxylase and GTP cyclohydrolase. Cells transfected with such vectors and the use of such transformed cells to increase dopamine production in the central nervous system of animals are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 29 OF 63 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 2
ACCESSION NUMBER: 2000271026 EMBASE
TITLE: [Neural transplants in Parkinson's disease: Clinical results after 10 years' experience].
TRASPLANTES NEURALES EN LA ENFERMEDAD DE PARKINSON: RESULTADOS CLINICOS TRAS 10 ANOS DE EXPERIENCIA.
AUTHOR: Lopez-Lozano J.J.; Mata M.; Bravo G.
CORPORATE SOURCE: Dr. J.J. Lopez-Lozano, Unidad Trasplan. Neur. Restr. Nerv., Clinica Puerta de Hierro, San Martin de Porres, 4, E-28035 Madrid, Spain. jlozano@cexp.cph.es
SOURCE: Revista de Neurologia, (1 Jun 2000) 30/11 (1077-1083).
Refs: 81
ISSN: 0210-0010 CODEN: RVNRAA
COUNTRY: Spain
DOCUMENT TYPE: Journal; Conference Article
FILE SEGMENT: 008 Neurology and Neurosurgery
LANGUAGE: Spanish
SUMMARY LANGUAGE: English; Spanish; Italian
AB Introduction. At the end of the 1970s people considered the possibility that **transplants** might be useful to replace degenerate specific cell populations, **such** as the mesencephalic dopaminergic neurones in Parkinson's disease (PD). Since then this has become an experimental alternative treatment for patients with degenerative diseases. The history of **transplants** of catecholamine producing tissues within the brain of patients with PD started in 1985, when Backlund et al published the results of the first implants of autologous adrenal medulla in two patients with Parkinsonism. Since then, many patients throughout the world have benefited from the results obtained using this method. Two main types of tissue have been used in this

method.' autologous adrenal medulla and human foetal ventral mesencephalic tissue. Development. In this paper we first review the clinical effects of the diverse types of transplant done to date. Then in the second part we give a summary of the clinical results obtained by our group with the different types of transplant carried out. We explain their evolution, original hypothesis and justify the reasons which led us to use three different types of donor material: autologous adrenal medulla, fetal tissue and adrenal medulla co-incubated with peripheral nerve. Then, after showing that the clinical improvement is different depending on the type of tissue **transplanted**, we comment on the probable reason for the improvement seen in patients with implants. Conclusion. The **transplantation** of nervous tissue seems to us to be no longer an experimental alternative for the treatment of PD but has become an effective, lasting treatment for patients with Parkinson's disease.

L33 ANSWER 30 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1999057149 PCTFULL ED 20020515
TITLE (ENGLISH): COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL CADHERIN-MEDIATED FUNCTIONS
TITLE (FRENCH): COMPOSES ET PROCEDES SERVANT A MODULER DES FONCTIONS ETABLIES PAR L'INTERMEDIAIRE DE CADHERINE NON CLASSIQUE
INVENTOR(S): BLASCHUK, Orest, W.;
GOUR, Barbara, J.;
BYERS, Stephen
PATENT ASSIGNEE(S): ADHEREX TECHNOLOGIES, INC.;
BLASCHUK, Orest, W.;
GOUR, Barbara, J.;
BYERS, Stephen
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9957149	A2	19991111

DESIGNATED STATES
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.:	WO 1999-CA363	A	19990505
PRIORITY INFO.:	US 1998-09/073,040		19980505
	US 1998-09/187,859		19981106
	US 1999-09/234,395		19990120
	US 1999-09/264,516		19990308

ABEN Modulating agents for inhibiting or enhancing nonclassical cadherin mediated cell adhesion are provided. The modulating agents comprise one or more of: (a) a peptide sequence that is at least 50 % identical to a nonclassical cadherin CAR sequence; (b) a non-peptide mimetic of a nonclassical cadherin CAR sequence; (c) a substance, such as an antibody or antigen-binding fragment thereof, that specifically binds a nonclassical cadherin CAR sequence; and/or (d) a polynucleotide encoding a polypeptide that comprises a nonclassical cadherin CAR sequence or analogue thereof. Methods for using such modulating agents for modulating nonclassical cadherin-mediated cell adhesion in a variety of contexts are also provided.

ABFR L'invention concerne des agents de modulation servant a inhiber ou a amplifier l'adhesion cellulaire creee par l'intermediaire de cadherine non classique. Ces agents de modulation comprennent un ou plusieurs elements parmi (a) une sequence de peptides au moins identique a 50 % a une sequence CAR de cadherine non classique; (b) un mimetique non

peptidique d'une sequence CAR de
cadherine non classique; (c) une substance, telle qu'un anticorps ou un
de ses fragments de liaison
a un antigene, se fixant de facon specifique a une sequence CAR de
cadherine non classique et/ou (d)
un polynucleotide codant un polypeptide contenant une sequence CAR de
cadherine non classique ou un
de ses analogues. Elle concerne egalement des procedes servant a
utiliser ces agents de modulation
afin de moduler l'adhesion cellulaire creee par l'intermediaire de
cadherine non classique dans une
variete de contextes.

L33 ANSWER 31 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1999016791 PCTFULL ED 20020515
TITLE (ENGLISH): COMPOUNDS AND METHODS FOR REGULATING CELL ADHESION
TITLE (FRENCH): COMPOSES ET PROCEDES DE REGULATION D'ADHERENCE CELLULAIRE
INVENTOR(S): BLASCHUCK, Orest, W.;
GOUR, Barbara, J.
PATENT ASSIGNEE(S): ADHEREX INC.;
BLASCHUCK, Orest, W.;
GOUR, Barbara, J.
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9916791	A2	19990408

DESIGNATED STATES
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE
ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU
SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH
GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT
BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF
BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 1998-CA902 A 19980929
PRIORITY INFO.: US 1997-08/939,853 19970929
ABEN Methods for using modulating agents to enhance or inhibit
cadherin-mediated cell adhesion in a
variety of i(in vivo) and i(in vitro) contexts are provided. In
particular, the modulating agents
may be used in the therapy of multiple sclerosis and other demyelinating
diseases. The modulating
agents comprise at least one cadherin cell adhesion recognition sequence
(HAV) or an antibody or
fragment thereof that specifically binds to a cadherin cell adhesion
recognition sequence.
Modulating agents may additionally comprise one or more cell adhesion
recognition sequences
recognized by other adhesion molecules. Such modulating agents may, but
need not, be linked to a
targeting agent, drug and/or support material.
ABFR L'invention concerne des procedes d'utilisation d'agents de modulation
permettant d'ameliorer
ou d'inhiber l'adherence cellulaire a mediation de cadherine dans une
variete de contextes i(in vivo
)et i(in vitro.)Plus particulierement, les agents de modulation peuvent
etre utilises dans la
therapie de la sclerose en plaques et d'autres maladies demyelinisantes.
Lesdits agents comportent
au moins une sequence de reconnaissance d'adherence cellulaire a
mediation de cadherine (HAV) ou un
anticorps ou fragment d'anticorps qui se lie specifiquement a une
sequence de reconnaissance
d'adherence cellulaire a mediation de cadherine. Les agents de
modulation peuvent comprendre en
outre une ou plusieurs sequences de reconnaissance d'adherence
cellulaire a mediation de cadherine
reconnues par d'autres molecules d'adherence. De tels agents de

modulation peuvent, sans pour autant
y etre contraints, etre lies a un agent de ciblage, un medicament et/ou
un materiau support.

L33 ANSWER 32 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1999014235 PCTFULL ED 20020515
TITLE (ENGLISH): PERSEPHIN AND RELATED GROWTH FACTORS
TITLE (FRENCH): PERSEPHINE ET FACTEURS DE CROISSANCE ASSOCIES
INVENTOR(S): JOHNSON, Eugene, M.;
MILBRANDT, Jeffrey, D.;
KOTZBAUER, Paul, T.;
LAMPE, Patricia, A.;
KLEIN, Robert;
DeSAUVAGE, Fred
PATENT ASSIGNEE(S): WASHINGTON UNIVERSITY;
JOHNSON, Eugene, M.;
MILBRANDT, Jeffrey, D.;
KOTZBAUER, Paul, T.;
LAMPE, Patricia, A.;
KLEIN, Robert;
DeSAUVAGE, Fred
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9914235	A1	19990325

DESIGNATED STATES
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE
ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU
SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH
GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT
BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF
BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
APPLICATION INFO.: WO 1998-US19163 A 19980915
PRIORITY INFO.: US 1997-08/931,858 19970916
ABEN A novel growth factor, persephin, which belongs to the GDNF/neurturin
family of growth factors,
is disclosed. The human, mouse and rat amino acid sequences have been
identified. Human, mouse and
rat persephin genomic DNA sequences have been cloned and sequenced and
the respective cDNA sequences
identified. In addition, methods for treating degenerative conditions
using persephin, methods for
detecting persephin gene alterations and methods for detecting and
monitoring patient levels of
persephin are provided. Methods for identifying additional members of
the persephin-neurturin-GDNF
family of growth factors are also provided.
ABFR L'invention se rapporte a un nouveau facteur de croissance, la
persephine, qui fait partie de
la famille GDNF/neurturine des facteurs de croissance. On a identifie
des sequences d'acides amines
de l'humain, du rat et de la souris. Les sequences d'ADN genomique de la
persephine chez l'humain,
le rat et la souris ont ete clonees et mises en sequences, et l'on a
identifie les sequences de
l'ADN-c correspondants. En outre, l'invention se rapporte a des procedes
pour traiter a la
persephine les etats de degenerescence, a des procedes pour detecter les
alterations du gene de la
persephine et a des procedes pour detecter et surveiller le taux de
persephine des patients.
L'invention concerne egalement des procedes pour identifier d'autres
membres de la famille de la
persephine-neurturine-GDNF des facteurs de croissance.

L33 ANSWER 33 OF 63 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN DUPLICATE 3
ACCESSION NUMBER: 1999315130 EMBASE

TITLE: Isolation and intracerebral grafting of nontransformed multipotential embryonic human CNS stem cells.
AUTHOR: Vescovi A.L.; Gritti A.; Galli R.; Parati E.A.
CORPORATE SOURCE: Dr. A.L. Vescovi, Natl. Neurol. Institute 'C. Besta', Via Celoria 11, 20133 Milan, Italy. vescovi@tin.it
SOURCE: Journal of Neurotrauma, (1999) 16/8 (689-693).
Refs: 15
ISSN: 0897-7151 CODEN: JNEUE4
COUNTRY: United States
DOCUMENT TYPE: Journal; Conference Article
FILE SEGMENT: 008 Neurology and Neurosurgery
LANGUAGE: English
SUMMARY LANGUAGE: English

AB In this work, we show that the embryonic human brain contains multipotent central nervous system (CNS) stem cells, which may provide a continuous, standardized source of human neurons that could virtually eliminate the use of primary human fetal brain tissue for intracerebral **transplantation**. Multipotential stem cells can be isolated from the developing human CNS in a reproducible fashion and can be exponentially expanded for longer than 2 years. This allows for the establishment of continuous, nontransformed neural cell lines, which can be frozen and banked. By clonal analysis, reverse transcription polymerase chain reaction, and electrophysiological assay, we found that over **such** long-term culturing these cells retain both multipotentiality and an unchanged capacity for the generation of neuronal cells, and that they can be induced to differentiate into catecholaminergic neurons. Finally, when **transplanted** into the brain of adult rodents immunosuppressed by cyclosporin A, human CNS stem cells migrate away from the site of injection and differentiate into neurons and astrocytes. No tumor formation was ever observed. Aside from depending on scarce human neural **fetal tissue**, the use of human embryonic CNS stem cells for clinical neural **transplantation** should provide a reliable solution to some of the major problems that pertain to this field, and should allow determination of the safety characteristics of the **donor** cells in terms of tumorigenicity, viability, sterility, and antigenic compatibility far in advance of the scheduled day of surgery.

L33 ANSWER 34 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1998045319 PCTFULL ED 20020514
TITLE (ENGLISH): COMPOUNDS AND METHODS FOR INHIBITING THE INTERACTION BETWEEN 'alpha'-CATENIN and 'beta'-CATENIN
TITLE (FRENCH): COMPOSES ET PROCEDES PERMETTANT D'INHIBER L'INTERACTION ENTRE L''alpha'-CATENINE ET LA 'beta'-CATENINE
INVENTOR(S): BLASCHUK, Orest, W.;
GOUR, Barbara, J.
PATENT ASSIGNEE(S): McGILL UNIVERSITY;
BLASCHUK, Orest, W.;
GOUR, Barbara, J.
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9845319	A2	19981015

DESIGNATED STATES
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
APPLICATION INFO.: WO 1998-CA322 A 19980414
PRIORITY INFO.: US 1997-60/043,361 19970410

ABEN Modulating agents for inhibiting an interaction between 'alpha'-catenin and 'beta'-catenin are provided. The modulating agents comprise one or more of: (a) a 'beta'-catenin HAV motif; (b) a peptide analogue or mimetic of a 'beta'-catenin HAV motif; or (c) an antibody or antigen-binding fragment thereof that specifically binds to a 'beta'-catenin HAV motif.

Methods for using such
modulating agents for inhibiting cadherin-mediated cell adhesion in a variety of contexts are also
provided.

ABFR L'invention concerne des agents modulateurs permettant d'inhiber une interaction entre
l''alpha'-catenine et la 'beta'-catenine. Ces agents modulateurs contiennent (a) un ou plusieurs
motifs HAV de la 'beta'-catenine; (b) un ou plusieurs analogues peptidiques ou composes
peptidomimetiques du motif HAV d'une 'beta'-catenine; ou (c) un ou plusieurs anticorps ou fragments
de fixation de l'antigene de ce motif qui se fixent en particulier sur un motif HAV de la
'beta'-catenine. L'invention se rapporte egalement a des procedes d'utilisation de ces agents
modulateurs, procedes visant a inhiber l'adherence intercellulaire due a la cadherine, et ce, dans
une pluralite de contextes.

L33 ANSWER 35 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1998016630 PCTFULL ED 20020514
TITLE (ENGLISH): METHODS FOR THE GENERATION OF PRIMORDIAL GERM CELLS AND TRANSGENIC ANIMAL SPECIES
TITLE (FRENCH): TECHNIQUES PERMETTANT LA PRODUCTION DE CELLULES SEXUELLES PRIMORDIALES ET D'ESPECES ANIMALES TRANSGENIQUES
INVENTOR(S): PIEDRAHITA, Jorge, A.;
BAZER, Fuller, W.
PATENT ASSIGNEE(S): THE TEXAS A & M UNIVERSITY SYSTEM;
PIEDRAHITA, Jorge, A.;
BAZER, Fuller, W.
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9816630	A1	19980423

DESIGNATED STATES
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US US UZ VN YU ZW GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

APPLICATION INFO.:	WO 1997-US18644	A	19971010
PRIORITY INFO.:	US 1996-60/027,338		19961011
	US 1997-60/046,094		19970509

ABEN Disclosed are methods for the isolation of primordial germ cells, culturing these cells to
produce primordial germ cell-derived cell lines, methods for transforming both the primordial germ
cells and the cultured cell lines, and using these transformed cells and cell lines to generate
transgenic animals. The efficiency at which transgenic animals are generated by the present
invention is greatly increased, thereby allowing the use of homologous recombination in producing
transgenic non-rodent animal species.

ABFR L'invention, qui a trait a des techniques d'isolation de cellules sexuelles primordiales et de
culture de ces cellules aux fins de la production de lignees cellulaires derivees de la cellule
sexuelle primordiale, porte egalement sur des techniques de transformation, tant des cellules
sexuelles primordiales que des lignees cellulaires derivees, ainsi que sur des techniques
d'utilisation de ces cellules transformees et des lignees cellulaires aux fins de la production
d'animaux transgeniques. Cette invention, qui permet d'ameliorer

notablement le rendement de cette
production d'animaux transgeniques, autorise l'emploi de processus de
recombinaison homologue dans
la production d'especes animales transgeniques, a savoir des
non-rongeurs.

L33 ANSWER 36 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1997033911 PCTFULL ED 20020514
TITLE (ENGLISH): PERSEPHIN AND RELATED GROWTH FACTORS
TITLE (FRENCH): PERSEPHINE ET FACTEURS DE CROISSANCE ASSOCIES
INVENTOR(S): JOHNSON, Eugene, M., Jr.;
MILBRANDT, Jeffrey, D.;
KOTZBAUER, Paul, T.;
LAMPE, Patricia, A.
PATENT ASSIGNEE(S): WASHINGTON UNIVERSITY;
JOHNSON, Eugene, M., Jr.;
MILBRANDT, Jeffrey, D.;
KOTZBAUER, Paul, T.;
LAMPE, Patricia, A.
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9733911	A1	19970918

DESIGNATED STATES
W: AL AM AT AU AZ BB BG BR BY CA CH CN CU CZ DE DK EE ES
FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ
TM TR TT UA UG US UZ VN YU GH KE LS MW SD SZ UG AM AZ
BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE
IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN
TD TG
APPLICATION INFO.: WO 1997-US3461 A 19970314
PRIORITY INFO.: US 1996-8/615,944 19960314
ABEN A novel growth factor, persephin, which belongs to the GDNF/neurturin
family of growth factors,
is disclosed. The mouse and rat amino acid sequences have been
identified. Mouse and rat persephin
genomic DNA sequences have been cloned and sequenced and the respective
cDNA sequences identified.
In addition, methods for treating degenerative conditions using
persephin, methods for detecting
persephin gene alterations and methods for detecting and monitoring
patient levels of persephin are
provided. Methods for identifying additional members of the
persephin-neurturin-GDNF family of
growth factors are also provided.
ABFR L'invention concerne un nouveau facteur de croissance, la persephine,
qui appartient a la
famille de la neurturine/GDNF des facteurs de croissance. Les sequences
d'acides amines du rat et de
la souris ont ete identifiees. Les sequences d'ADN genomique de la
persephine du rat et de la souris
ont ete clonees et mises en sequences, et les sequences d'ADNc
respectives identifiees. En outre,
l'invention a pour objet des procedes pour traiter les etats de
degenerescence a l'aide de la
persephine, des procedes pour detecter les alterations du gene de la
persephine, et des procedes
pour detecter et controler les taux de persephine des patients.
L'invention traite aussi de procedes
pour identifier les membres supplementaires de la famille de la
persephine-neurturine-GDNF des
facteurs de croissance.

L33 ANSWER 37 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1997024924 PCTFULL ED 20020514
TITLE (ENGLISH): THE PRESERVATION OF TISSUE DURING REMOVAL, STORAGE AND
IMPLANTATION
TITLE (FRENCH): PRESERVATION DE TISSUS PENDANT LEUR PRELEVEMENT, LEUR

STOCKAGE ET LEUR IMPLANTATION
INVENTOR(S): SIMPKINS, James, W.;
GREEN, Pattie, S.;
GRIDLEY, Kelly, E.
PATENT ASSIGNEE(S): UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC.
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9724924	A1	19970717

DESIGNATED STATES
W: AU CA JP KR AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
APPLICATION INFO.: WO 1997-US482 A 19970110
PRIORITY INFO.: US 1996-60/009,705 19960111
US 1996-8/685,574 19960724

ABEN The present invention is directed to a method for enhancing cell viability in a population of graft cells during a transplantation procedure that includes the steps of selecting an effective dose of a polycyclic phenolic compound in a physiological acceptable formulation, exposing the population of graft cells to the formulation containing the compound within a time that is effectively proximate to the transplantation procedure, and conferring cytoprotection on the population of graft cells. The polycyclic compound may include a four ring, a three ring, or a two ring structure, having a molecular weight of less than 1000 Daltons. The compound may have a molecular weight of greater than 170 Daltons. The effective dose of the compound may achieve concentrations less than 200nM or greater than 0.2nM. The method may further comprise the step of exposing the graft cells to the compound prior to removal from the donor, during storage in vitro or during reperfusion in the recipient animal.

ABFR L'invention porte sur une methode accroissant la viabilite d'une population de cellules greffees lors d'une transplantation. Ladite methode consiste a selectionner une dose efficace d'un compose phenolique polycyclique place dans une preparation a compatibilite physiologique et a exposer cette population de cellules a ladite preparation pendant un temps correspondant au processus de transplantation, de maniere a conferer une cyto-protection a la population de cellules greffees. Le compose polycyclique peut presenter une structure a quatre, trois ou deux cycles d'un poids moleculaire inferieur a 1000 daltons et superieur a 170 daltons. La dose efficace du compose peut presenter une concentration comprise entre 200nM et 0,2nM. La methode peut egalement comprendre une etape consistant a exposer les cellules greffees au compose avant leur prelevement sur le donneur, ou pendant leur stockage in vitro ou la reperfusion de l'animal recepteur.

L33 ANSWER 38 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1997008196 PCTFULL ED 20020514
TITLE (ENGLISH): NEURTURIN AND RELATED GROWTH FACTORS
TITLE (FRENCH): NEURTURIN ET FACTEURS DE CROISSANCE CONNEXES
INVENTOR(S): JOHNSON, Eugene, M., Jr.;
MILBRANDT, Jeffrey, D.;
KOTZBAUER, Paul, T.;
LAMPE, Patricia, A.
PATENT ASSIGNEE(S): WASHINGTON UNIVERSITY;
JOHNSON, Eugene, M., Jr.;
MILBRANDT, Jeffrey, D.;
KOTZBAUER, Paul, T.;

LAMPE, Patricia, A.
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9708196	A1	19970306

DESIGNATED STATES
W: AL AM AT AU AZ BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
APPLICATION INFO.: WO 1996-US14065 A 19960827
PRIORITY INFO.: US 1995-8/519,777 19950828

ABEN A novel growth factor, neurturin, is disclosed and the human and mouse amino acid sequences are identified. Human and mouse neurturin genomic DNA sequences have been cloned and sequenced and the respective cDNA sequences identified. The subcloning into vectors and the preparation of cells stably transformed with the vectors are also disclosed. In addition, methods for treating degenerative conditions, tumor cells and obesity; methods for detecting gene alterations and methods for detecting and monitoring patient levels of neurturin are provided. Methods for identifying additional members of the neurturin-GDNF family of growth factors are also provided.

ABFR L'invention porte sur un nouveau facteur de croissance, nomme neurturin, ainsi que sur l'identification des sequences d'acides amines chez l'homme et la souris. On a clone et sequence des sequences d'ADN genomique de neurturin chez l'homme et la souris et identifie les sequences d'ADN complementaire respectives. L'invention, qui porte sur un clonage complementaire en vecteurs ainsi que sur la production de cellules transformees de facon stable par lesdits vecteurs, concerne egalement des methodes de traitement de pathologies degeneratives, de l'obesite et de cellules tumorales, des procedes de detection de modifications de gene ainsi que de detection et de surveillance de taux de neurturin chez un patient et, enfin, des procedes permettant l'identification d'elements complementaires de la famille GDNF-neurturin (facteur neurotrophique derive de la cellule gliale) des facteurs de croissance.

L33 ANSWER 39 OF 63 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 4
ACCESSION NUMBER: 97026331 EMBASE
DOCUMENT NUMBER: 1997026331
TITLE: Discordant xenogeneic neonatal thymic transplantation can induce donor- specific tolerance.
AUTHOR: Khan A.; Sergio J.J.; Zhao Y.; Pearson D.A.; Sachs D.H.; Sykes M.
CORPORATE SOURCE: Dr. M. Sykes, Surgical Service, Transplantation Biology Res. Center, Massachusetts General Hospital, 13th Street, Boston, MA 02129, United States
SOURCE: Transplantation, (1997) 63/1 (124-131).
Refs: 13
ISSN: 0041-1337 CODEN: TRPLAU
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English

AB The limited supply of human organs for **transplantation** necessitates the development of methods leading to acceptance of

xenografts. To avoid the hazards of the high-dose chronic immunosuppressive pharmacotherapy which would otherwise be required for **successful** xenografting, it would be desirable to induce permanent tolerance to xenogeneic **donors**. We have recently demonstrated that xenogeneic **donor**-specific tolerance can be induced by **transplanting** fetal pig thymic and hematopoietic tissue into thymectomized, T cell-depleted, and natural killer-cell-depleted mice, or into natural killer cell-depleted nude mice. We have now extended these studies by replacing **fetal tissue** with neonatal pig thymic and hematopoietic tissue, and by examining the in vivo responses of reconstituted mice to pig skin grafts. Neonatal tissue was studied because it might be more practicable than **fetal tissue** for the purpose of **transplantation** to primates. BALB/c nu/nu mice **transplanted** with neonatal (<24-hr-old) pig thymus and spleen fragments developed circulating mouse CD4+ cells. The pig thymus grafts were necessary for mouse T-cell development, as CD4 recovery did not occur in recipients of neonatal pig splenic tissue alone. The CD4+ cells that developed included Vβ8.1/2+ T cells in similar proportions as in BALB/c mice, and Vβ11+ and Vβ5+ CD4 T cells were deleted almost as completely as in normal BALB/c mice. This deletion was detected among CD4 single-positive graft thymocytes. In 9 of 12 evaluable animals, mixed lymphocyte responses demonstrated tolerance to **donor**-type pig SLA antigens, with responsiveness to alloantigens and/or third-party pig xenoantigens. Furthermore, grafting of neonatal pig thymus conferred the ability to reject allogeneic mouse skin in 7 of 10 animals. In addition, 7 of 10 animals accepted paternal (**donor** SLA-matched) skin (median survival time [MST] > 100 days), whereas 4 of 4 animals rejected third-party SLA-mismatched pig skin (MST=40.5 days). We conclude that neonatal pig thymi **transplanted** to BALB/c nu/nu mice can support the development of mouse CD4+ cells that are functional and specifically tolerant to **donor**-type pig antigens.

L33 ANSWER 40 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1996037208 PCTFULL ED 20020514
TITLE (ENGLISH): ALLOGENEIC CELL THERAPY FOR CANCER FOLLOWING ALLOGENEIC STEM CELL TRANSPLANTATION
TITLE (FRENCH): THERAPIE CELLULAIRE ALLOGENIQUE ANTICANCEREUSE SUIVANT UNE TRANSPLANTATION DE CELLULES SOUCHES ALLOGENIQUES
INVENTOR(S): SLAVIN, Shimon
PATENT ASSIGNEE(S): BAXTER INTERNATIONAL INC.;
HADASIT MEDICAL RESEARCH SERVICES AND DEVELOPMENT LTD.;
SLAVIN, Shimon
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9637208	A1	19961128

DESIGNATED STATES
W: AU CA JP MX NO US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
APPLICATION INFO.: WO 1996-US7652 A 19960524
PRIORITY INFO.: US 1995-8/449,764 19950525
ABEN Methods and materials are described for treating cancer patients with solid tumors who have undergone a cancer therapy regimen including allogeneic bone marrow transplantation. Allogeneic lymphocytes are administered to such patients. Patients with solid tumors and patients with hematopoietic tumors also may be treated with allogeneic lymphocytes pre-activated by exposure in vitro to a T-cell activator. The same or a different T-cell activator additionally can be administered to the patient in vivo.
ABFR L'invention se rapporte a des procedes et a des materiaux destines a etre utilises dans le traitement de patients atteints d'un cancer et presentant des tumeurs solides, ces patients ayant **subi** un traitement therapeutique, y compris une transplantation de moelle osseuse allogenique. Des lymphocytes allogeniques sont administres a ces patients. Des patients

presentant des tumeurs
solides et des patients presentant des tumeurs hematopoietiques peuvent egalement etre traites au
moyen de lymphocytes allogeniques pre-actives par une exposition in vitro a un activateur de
lymphocytes T. Le meme activateur de lymphocytes T ou un autre peut etre, de plus, administre au
patient in vivo.

L33 ANSWER 41 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1996006165 PCTFULL ED 20020514
TITLE (ENGLISH): GENETICALLY ENGINEERED SWINE CELLS
TITLE (FRENCH): CELLULES PORCINES TRAITEES PAR GENIE GENETIQUE
INVENTOR(S): SACHS, David, H.;
SYKES, Megan;
BAETSCHER, Manfred
PATENT ASSIGNEE(S): THE GENERAL HOSPITAL CORPORATION;
BIOTRANSPLANT, INC.
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9606165	A1	19960229

DESIGNATED STATES
W: AU CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
APPLICATION INFO.: WO 1995-US10250 A 19950810
PRIORITY INFO.: US 1994-8/292,565 19940819
ABEN A genetically engineered cell for inducing tolerance.
ABFR Cellules porcines traitees par genie genetique induisant la tolerance aux transplants.

L33 ANSWER 42 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1996005319 PCTFULL ED 20020514
TITLE (ENGLISH): GENETICALLY ENGINEERED CELLS THAT PRODUCE DOPAMINE
TITLE (FRENCH): CELLULES OBTENUES PAR GENIE GENETIQUE ET PRODUISANT DE LA DOPAMINE
INVENTOR(S): KANG, Un, Jung;
GAGE, Fred, H.
PATENT ASSIGNEE(S): ARCH DEVELOPMENT CORPORATION;
KANG, Un, Jung;
GAGE, Fred, H.
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9605319	A1	19960222

DESIGNATED STATES
W: AU CA JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
APPLICATION INFO.: WO 1995-US10291 A 19950811
PRIORITY INFO.: US 1994-8/290,028 19940812
ABEN The present invention provides a process of increasing dopamine production in a cell comprising
co-transfecting the cell with one or more expression vectors containing polynucleotides that encode
tyrosine hydroxylase, aromatic L-amino acid decarboxylase and GTP cyclohydrolase. Cells transfected
with such vectors and the use of such transformed cells to increase dopamine production in the
central nervous system of animals are also provided.
ABFR Procede permettant de stimuler la production de dopamine dans une cellule. Ce procede consiste
a co-transfecter la cellule avec un ou plusieurs vecteurs d'expression renfermant des
polynucleotides codant la tyrosine-hydroxylase, la L-aminoacide-decarboxylase aromatique et la
guanosine triphosphate-cyclohydrolase. L'invention porte egalement sur des cellules transfectees a

l'aide de tels vecteurs et sur l'utilisation de telles cellules transformees pour accroitre la
production de dopamine dans le systeme nerveux central.

L33 ANSWER 43 OF 63 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 5
ACCESSION NUMBER: 1996:377790 BIOSIS
DOCUMENT NUMBER: PREV199699100146
TITLE: A mathematical model for the estimation of human embryonic and fetal age.
AUTHOR(S): Evtouchenko, L.; Studer, L.; Spenger, C. [Reprint author]; Dreher, E.; Seiler, R. W.
CORPORATE SOURCE: Dep. Neurosurg., Univ. Bern, Inselspital, Freiburgstrasse, CH-3010 Bern, Switzerland
SOURCE: Cell Transplantation, (1996) Vol. 5, No. 4, pp. 453-464. ISSN: 0963-6897.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Aug 1996
Last Updated on STN: 26 Aug 1996

AB Precise determination of **donor** age in human embryonic and **fetal tissue** is crucial for cell **transplantation** due to the existence of distinct time windows within which **successful** grafting is possible. This study demonstrates that between 4-12 wk postconception embryonic and fetal age can be estimated based on various morphometric parameters measured on a routine basis in suction abortion material. The greatest length, the neck-rump length, the foot length, and the proximal and distal arm and leg length were correlated with the anamnestic and ultrasonographically estimated age. Multivariate regression analyses showed a linear correlation between age and the logarithmic value of the various morphometric parameters. The best correlation was found for a mathematical model combining the limb parameters (r = 0.904; p lt 0.001; n = 37). A prospective follow-up study (n = 40) was carried out to test the validity of the mathematical model. A high correlation was found between the calculated age and the estimated age based on anamnestic data (r = 0.749,p lt 0.001). Outliers due to errors in the anamnestic data were readily identified by comparing anamnestic with calculated age. This method allows determination of embryonic and fetal age within and beyond the age group of the Carnegie classification and may, therefore, be useful for the needs of experimental and clinical cell transplantation.

L33 ANSWER 44 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1995012317 PCTFULL ED 20020514
TITLE (ENGLISH): IMPROVED POSTANATAL AND IN UTERO FETAL HEMATOPOIETIC STEM CELL TRANSPLANTATION METHODS
TITLE (FRENCH): PROCEDES DE TRANSPLANTATION IN UTERO ET POSTNATALE DE CELLULES SOUCHES HEMATOPIETIQUES FOETALE
INVENTOR(S): HARRISON, Michael, R.;
RICE, Henry, E.
PATENT ASSIGNEE(S): THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9512317	A1	19950511

DESIGNATED STATES
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN KE MW SD SZ AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
APPLICATION INFO.: WO 1994-US11557 A 19941012
PRIORITY INFO.: US 1993-8/147,528 19931105

ABEN The application concerns improved postnatal and in utero fetal hematopoietic stem cell (HSC) transplantation methods. The application further concerns a method for the ex vivo expansion of fetal HSC using an artificial capillary system (ACS). Also, the application concerns a xenograft

system for confirming the presence of fetal HSC after expansion in an ACS cartridge. A method for transducing ex vivo expanding fetal HSC with packaged recombinant retrovirus vectors is also provided.

ABFR L'invention concerne des procedes de transplantation postnatale et in utero de cellules souches hematopoietiques foetales, ainsi qu'un procede d'expansion ex vivo de cellules souches hematopoietiques foetales a l'aide d'un systeme capillaire artificiel. L'invention porte egalement sur un systeme de xenogreffe permettant de confirmer la presence de cellules souches hematopoietiques foetales apres leur expansion dans une cartouche de systeme capillaire artificiel, et sur un procede de transduction ex vivo des cellules souches hematopoietiques foetales en expansion a l'aide de vecteurs de retrovirus recombines encapsides.

L33 ANSWER 45 OF 63 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 6

ACCESSION NUMBER: 95371950 EMBASE
DOCUMENT NUMBER: 1995371950
TITLE: Development of the human striatum: Implications for fetal striatal transplantation in the treatment of Huntington's disease.
AUTHOR: Freeman T.B.; Sanberg P.R.; Isacson O.
CORPORATE SOURCE: Division of Neurosurgery, Pharmacol./Exptl. Therapeutics Dept., University of South Florida, 4 Columbia Drive,Tampa, FL 33606, United States
SOURCE: Cell Transplantation, (1995) 4/6 (539-545).
ISSN: 0963-6897 CODEN: CTRAE8
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 008 Neurology and Neurosurgery
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Fetal neural **transplantation** has recently been demonstrated to ameliorate motor and other behavioral deficits in animal models of Huntington's disease, and reconstruct many of the damaged striatal circuits. However, there has been significant variability in the histological appearance of these grafts, most likely related to differences of the regions of dissection of the **donor** tissue. Selective dissection and **transplantation** of the lateral ventricular eminence in rodents has resulted in grafts consisting of primarily striatal- like tissue. This data, combined with data from our own and other laboratories has led to a description of the development of the human striatum, with a particular emphasis on the relevance of human striatal development to the field of **fetal tissue transplantation** for the treatment of Huntington's disease. If the goal of **transplantation** is to graft GABAergic striatal projection neurons, it is our impression that optimal grafting results will occur when **transplants** are derived from the lateral ventricular eminence and the lateral aspect of the body of the ventricular eminence anterior to the foramen of Monro. Optimal results are likely to occur when **donor** ages range from Stage 19 to 23, with possible graft **success** when donor age extends to as late as postovulatory week 22.

L33 ANSWER 46 OF 63 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN

ACCESSION NUMBER: 95:371321 SCISEARCH
THE GENUINE ARTICLE: QY120
TITLE: GRAFTS AND THE ART OF MINDS RECONSTRUCTION - AUTHORS RESPONSE
AUTHOR: SINDEN J D (Reprint); HODGES H; GRAY J A
CORPORATE SOURCE: INST PSYCHIAT, DEPT PSYCHOL, DE CRESPIGNY PK, LONDON SE5 8AF, ENGLAND (Reprint)
COUNTRY OF AUTHOR: ENGLAND
SOURCE: BEHAVIORAL AND BRAIN SCIENCES, (MAR 1995) Vol. 18, No. 1, pp. 79-86.

ISSN: 0140-525X.
DOCUMENT TYPE: Discussion; Journal
FILE SEGMENT: SOCSEARCH; LIFE
LANGUAGE: ENGLISH
REFERENCE COUNT: 62
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The use of neural **transplantation** to alleviate cognitive deficits is still in its infancy. We have an inadequate understanding of the deficits induced by different types of brain damage and their homologies in animal models against which to assess graft-induced recovery, and of the ways in which graft growth and function are influenced by factors within the host brain and the environment in which the host is operating. Further, use of **fetal tissue** may only be a transitory phase in the search for appropriate **donor** sources. Nevertheless, findings from our laboratory and elsewhere have made a prima facie case for **successful** cognitive reconstruction by graft methods.

L33 ANSWER 47 OF 63 USPATFULL on STN
ACCESSION NUMBER: 94:28683 USPATFULL
TITLE: Genetically modified tyrosine hydroxylase and uses thereof
INVENTOR(S): Goldstein, Menek, New York, NY, United States
Wu, Jing, New York, NY, United States
Filer, David, New York, NY, United States
Friedhoff, Arnold J., New York, NY, United States
PATENT ASSIGNEE(S): New York University, New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5300436		19940405
APPLICATION INFO.:	US 1993-9075		19930126 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1991-669446, filed on 13 Mar 1991, now patented, Pat. No. US 5212082
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Hendricks, Keith D.
LEGAL REPRESENTATIVE: Browdy and Neimark
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 1275
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Modification of the DNA encoding the enzyme tyrosine hydroxylase (TH) resulting in amino acid substitution in one of the first fifty five N-terminal residues, in particular replacing Ser-40 with Tyr or Leu, produced TH variants having substantially increased enzymatic activity upon transfection of suitable host cells. Cells transfected with the variant TH having enhanced enzymatic activity are useful for treating neurological or psychiatric disorders associated with deficient TH or dopamine, in particular Parkinson's disease, by grafting such cells into the brain.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 48 OF 63 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 94237352 EMBASE
DOCUMENT NUMBER: 1994237352
TITLE: Fetal tissue research and prenatal fetal therapy: Ethical dilemmas.
AUTHOR: Still L.
CORPORATE SOURCE: Department of Diagnostic Ultrasound, Bellevue Community College, 3000 Landerholm Circle SE,Bellevue, WA 98007, United States
SOURCE: Journal of Diagnostic Medical Sonography, (1994) 10/4 (208-212).
ISSN: 8756-4793 CODEN: JDMSE2
COUNTRY: United States

DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 049 Forensic Science Abstracts
LANGUAGE: English
SUMMARY LANGUAGE: English
AB **Fetal tissue** research was a volatile political issue during the Reagan and Bush administrations. The recent lifting of the federal moratorium banning **such** research raises many ethical questions. Recent advances in fetal therapy make it possible to cure fetal disease in **utero**. Ethical issues of **fetal tissue transplantation**, maternal-fetal rights, and resource allocation are discussed.

L33 ANSWER 49 OF 63 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 7
ACCESSION NUMBER: 94105810 EMBASE
DOCUMENT NUMBER: 1994105810
TITLE: Suprachiasmatic nucleus lesions abolish and fetal grafts restore circadian gnawing rhythms in hamsters.
AUTHOR: Le Sauter J.; Silver R.
CORPORATE SOURCE: Barnard College, Columbia University, 3009 Broadway,New York, NY 10027, United States
SOURCE: Restorative Neurology and Neuroscience, (1994) 6/2 (135-143).
ISSN: 0922-6028 CODEN: RNNEEL
COUNTRY: Ireland
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 008 Neurology and Neurosurgery
LANGUAGE: English
SUMMARY LANGUAGE: English
AB It is widely accepted that the suprachiasmatic nuclei (SCN) of the hypothalamus serve as biological pacemakers, organizing daily activities. However some circadian rhythms are controlled by extra-SCN structures. **Transplantation** of fetal donor SCN in SCN-lesioned rodents induces recovery of rhythmic locomotor and drinking activities. **Such** grafts do not however, restore appropriate gonadal responses to photoperiodic stimuli. It is not known whether other behavioral rhythms are restored by **fetal tissue** grafts, or whether various responses are restored simultaneously. In the present study, we established that circadian rhythms of gnawing hehavior are abolished following SCN lesions. Next, we measured both gnawing and wheel-running activity in SCN-lesioned hamsters following **transplantation** of fetal hypothalamic grafts containing the SCN. The results indicate that **such** grafts restore circadian rhythms of gnawing behavior, and that gnawing and wheel-running rhythms re-emerge at about the same time.

L33 ANSWER 50 OF 63 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 8
ACCESSION NUMBER: 94133447 EMBASE
DOCUMENT NUMBER: 1994133447
TITLE: Attitudes of women to fetal tissue research.
AUTHOR: Anderson F.; Glasier A.; Ross J.; Baird D.T.
CORPORATE SOURCE: Family Planning and Women's Health, Lothian Health Board,Edinburgh, United Kingdom
SOURCE: Journal of Medical Ethics, (1994) 20/1 (36-40).
ISSN: 0306-6800 CODEN: JMETDR
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 010 Obstetrics and Gynecology
049 Forensic Science Abstracts
LANGUAGE: English
SUMMARY LANGUAGE: English
AB The use of human **fetal tissue** for scientific research has enormous potential but is subject to government legislation. In the United Kingdom the Polkinghorne Committee's guidelines were accepted by the Department of Health in 1990. These guidelines set out to protect women undergoing termination of pregnancy from exploitation but in so doing may significantly restrict potential research. Although the committee took evidence from a wide variety of experts they did not seek the views of the general public. We asked 108 women about to have a therapeutic abortion; 167 women who had had a pregnancy terminated in the past and 419 women who had never had an abortion their views on research

using human **fetal tissue**. Regardless of their past experiences the women were overwhelmingly in favour of research using **fetal tissue** (94 per cent). They made little distinction between basic research and research with obvious clinical relevance and supported the concept of using **transplanted fetal tissue** for the treatment of adult disease **such** as Parkinsonism. Women about to undergo an abortion were significantly more likely ($p<0.001$) to approve of all types of research including that aimed at improving methods of abortion and research using live fetuses in **utero**.

L33 ANSWER 51 OF 63 PCTFULL COPYRIGHT 2004 Univentio on STN
ACCESSION NUMBER: 1993014790 PCTFULL ED 20020513
TITLE (ENGLISH): A METHOD FOR TRANSPLANTING CELLS INTO THE BRAIN AND THERAPEUTIC USES THEREFOR
TITLE (FRENCH): PROCEDE DE TRANSPLANTATION DE CELLULES DANS LE CERVEAU ET UTILISATIONS THERAPEUTIQUES DE CE PROCEDE
INVENTOR(S): CHERKSEY, Bruce, D.
PATENT ASSIGNEE(S): NEW YORK UNIVERSITY
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

	NUMBER	KIND	DATE
	WO 9314790	A1	19930805

DESIGNATED STATES
W: AU CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
APPLICATION INFO.: WO 1993-US494 A 19930121
PRIORITY INFO.: US 1992-823,654 19920123

ABEN A method for grafting a cell in the brain of a mammalian subject is accomplished by attaching the cell to a support matrix so that the cell attaches to the matrix surface, and implanting the support matrix with the attached cell into the brain. Preferred support matrices are glass or plastic microbeads, either solid or porous, having a diameter from about 90 to about 125 mum. The method employs cells of different types, preferably cells of neural or paraneural origin, such as adrenal chromaffin cells. Also useful are cell lines grown in vitro. Cells not of neural or paraneural origin, such as fibroblasts, may also be used following genetic alteration to express a desired neural product such as a neurotransmitter or a neuronal growth factor. The method is used to treat neurological diseases such as Parkinson's disease, Alzheimer's disease, Huntington's disease, epilepsy, and traumatic brain injury.

ABFR Selon un procede destine a greffer une cellule dans le cerveau d'un mammifere, on fixe la cellule a une matrice support de facon a ce que la cellule se fixe a la surface de la matrice, et on implante dans le cerveau la matrice support et la cellule fixee. Les matrices support preferees sont en verre ou sont faites de microbilles en plastique, solides ou poreuses, d'un diametre d'environ 90 a environ 125 mum. Ce procede utilise des cellules de types differents, de preference des cellules d'origine neurale ou paraneurale, telles que des cellules chromaffines surrenales. On utilise egalement des lignees cellulaires cultivees in vitro. Les cellules qui ne sont pas d'origine neurale ou paraneurale, telles que des fibroblastes, peuvent etre egalement utilisees selon la modification genetique pour exprimer un produit neural desire tel qu'un neurotransmetteur ou un facteur de croissance neuronal. Le procede est utilise pour traiter des maladies neurologiques telles que la maladie de Parkinson, la maladie d'Alzheimer, la maladie d'Huntington, l'epilepsie et les lesions

traumatiques du cerveau.

L33 ANSWER 52 OF 63 USPATFULL on STN
ACCESSION NUMBER: 93:39908 USPATFULL
TITLE: Genetically modified tyrosine hydroxylase and uses thereof
INVENTOR(S): Goldstein, Menek, New York, NY, United States
Wu, Jing, New York, NY, United States
Filer, David, New York, NY, United States
Friedhoff, Arnold J., New York, NY, United States
PATENT ASSIGNEE(S): New York University, New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5212082		19930518
APPLICATION INFO.:	US 1991-669446		19910313 (7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Hendricks, Keith D.
LEGAL REPRESENTATIVE: Browdy and Neimark
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 1070
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Modification of the DNA encoding the enzyme tyrosine hydroxylase (TH) resulting in amino acid substitution in one of the first fifty five N-terminal residues, in particular replacing Ser-40 with Tyr or Leu, produced TH variants having substantially increased enzymatic activity upon transfection of suitable host cells. Cells transfected with the variant TH having enhanced enzymatic activity are useful for treating neurological or psychiatric disorders associated with deficient TH or dopamine, in particular Parkinson's disease, by grafting such cells into the brain.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 53 OF 63 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 9
ACCESSION NUMBER: 91146914 EMBASE
DOCUMENT NUMBER: 1991146914
TITLE: Cellular replacement therapy for neurologic disorders: Potential of genetically engineered cells.
AUTHOR: Chen L.S.; Ray J.; Fisher L.J.; Kawaja M.D.; Schinstine M.; Kang U.J.; Gage F.H.
CORPORATE SOURCE: Dept. of Neurosciences, University of California,San Diego, La Jolla, CA 92093, United States
SOURCE: Journal of Cellular Biochemistry, (1991) 45/3 (252-257). ISSN: 0730-2312 CODEN: JCEBD5
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 008 Neurology and Neurosurgery
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Neural **transplantation**, a mode of cellular replacement, has been used as a therapeutic trial for Parkinson's disease. Studies indicate that tonic release of the metabolites from the graft that can be utilized by the host brain, is likely to be the major mechanism responsible for the therapeutic effect. The use of **fetal tissue** is complicated by ethical controversy and immunological incompatibility. Autografting adult tissue has not been **successful** mainly due to poor survival. Genetically engineered cells are promising alternative sources of **donor** cells. We have investigated the potential of primary skin fibroblasts as **donor** cells for intracerebral grafting. Primary skin fibroblasts survive in the brain and remain in situ. A number of genes (nerve growth factor, tyrosine hydroxylase, glutamic acid decarboxylase, and choline acetyltransferase) have been **successfully** introduced and expressed in the primary fibroblasts. The L-dopa-secreting primary fibroblasts exhibited a behavioral effect in

a rat model of Parkinson's disease up to 8 weeks after being grafted into denervated striatum. Factors that can maximize gene transfer, transgene expresion, and fibroblast survival in the brain make up to the future direction of investigation.

L33 ANSWER 54 OF 63 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 91174741 EMBASE
DOCUMENT NUMBER: 1991174741
TITLE: Effects of cool storage on survival and function of intrastriatal ventral mesencephalic grafts.
AUTHOR: Sauer H.; Brundin P.
CORPORATE SOURCE: Department of Medical, Physiology, University of Munich, Pettenkoferstr. 12,D-8000 Munich 2, Germany
SOURCE: Restorative Neurology and Neuroscience, (1991) 2/3 (123-135).
ISSN: 0922-6028 CODEN: RNNEEL
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 008 Neurology and Neurosurgery
021 Developmental Biology and Teratology
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Ongoing clinical trials with **fetal tissue transplants** in Parkinson's disease would be facilitated by an effective tissue storage technique that would allow for temporal separation of the procurement of the fetal **donor** tissue and implantation surgery. In order to develop **such** a method, we grafted rat or human fetal ventral mesencephalic tissue to the dopamine-depleted striatum of rats either directly, or following pregraft refrigeration in a 'hibernation' medium at 4°C. Rat tissue **transplants** were found to normalize amphetamine-induced circling behavior at 6 weeks post-**transplantation** after having been hibernated for either 2 or 5 days. The number of tyrosine hydroxylase immunoreactive neurons in these hibernated grafts did not differ significantly from that found in matched grafts of fresh tissue. Hibernation for 10 days resulted both in an absence of functional effects and in decreases of graft survival down to 10-20% of control values. Volume assessment of fresh and hibernated grafts prepared from human **fetal tissue** revealed no adverse effects of a 3 day hibernation interval at 3 weeks after **transplantation** into immunosuppressed rats. The results indicate that hibernation of neural tissue may be a convenient and simple tool, which can help to guarantee tissue availability at the planned time of implantation in patients and facilitate transport and bacteriological examination. Furthermore, the method offers a simple means which permits prolonged exposure of the neural tissue to trophic factors and specific markers prior to grafting in experimental animals.

L33 ANSWER 55 OF 63 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
ACCESSION NUMBER: 91:353312 SCISEARCH
THE GENUINE ARTICLE: FR396
TITLE: EFFECTS OF COOL STORAGE ON SURVIVAL AND FUNCTION OF INTRASTRIATAL VENTRAL MESENCEPHALIC GRAFTS
AUTHOR: SAUER H (Reprint); BRUNDIN P
CORPORATE SOURCE: UNIV MUNICH, DEPT MED PHYSIOL, PETTENKOFERSTR 12, W-8000 MUNICH 2, GERMANY (Reprint); UNIV LUND, DEPT MED CELL RES, S-22101 LUND, SWEDEN
COUNTRY OF AUTHOR: GERMANY; SWEDEN
SOURCE: RESTORATIVE NEUROLOGY AND NEUROSCIENCE, (1991) Vol. 2, No. 3, pp. 123-135.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: ENGLISH
REFERENCE COUNT: 49
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS
AB Ongoing clinical trials with **fetal tissue transplants** in Parkinson's disease would be facilitated by an effective tissue storage technique that would allow for temporal separation of the procurement of the fetal **donor** tissue and implantation surgery. In order to develop **such** a method, we

grafted rat or human fetal ventral mesencephalic tissue to the dopamine-depleted striatum of rats either directly, or following pregraft refrigeration in a 'hibernation' medium at 4-degrees-C. Rat tissue **transplants** were found to normalize amphetamine-induced circling behavior at 6 weeks post-**transplantation** after having been hibernated for either 2 or 5 days. The number of tyrosine hydroxylase immunoreactive neurons in these hibernated grafts did not differ significantly from that found in matched grafts of fresh tissue. Hibernation for 10 days resulted both in an absence of functional effects and in decreases of graft survival down to 10-20% of control values. Volume assessment of fresh and hibernated grafts prepared from human **fetal tissue** revealed no adverse effects of a 3 day hibernation interval at 3 weeks after **transplantation** into immunosuppressed rats. The results indicate that hibernation of neural tissue may be a convenient and simple tool, which can help to guarantee tissue availability at the planned time of implantation in patients and facilitate transport and bacteriological examination. Furthermore, the method offers a simple means which permits prolonged exposure of the neural tissue to trophic factors and specific markers prior to grafting in experimental animals.

L33 ANSWER 56 OF 63 EMBASE
on STN

ACCESSION NUMBER: 90261091 EMBASE
DOCUMENT NUMBER: 1990261091
TITLE: Comparison of growth, neovascularization, and enzymatic function of fetal intestinal grafts in the omentum and renal capsule.
AUTHOR: Tisinai K.; Shedd F.; Harris R.; Unthank J.; Grosfeld J.; Abu-Dalu K.; Grosfeld J.L.
CORPORATE SOURCE: Section of Pediatric Surgery, Indiana University Medical Center, Indianapolis, IN, United States
SOURCE: Journal of Pediatric Surgery, (1990) 25/8 (914-916). ISSN: 0022-3468 CODEN: JPDSA3
COUNTRY: United States
DOCUMENT TYPE: Journal; Conference Article
FILE SEGMENT: 048 Gastroenterology
LANGUAGE: English
SUMMARY LANGUAGE: English

AB **Fetal tissues** are less immunogenic and may be a useful **donor** source for organ **transplantation**. This report compares the fate of fetal small bowel segments **transplanted** in the omentum and renal capsule of recipient syngeneic rats. Two-centimeter segments of fetal jejunum and ileum were obtained from 26 **donor** 19-day gestational age rat fetuses and **transplanted** into the subrenal capsule (n = 35) and omentum (n = 40) in syngeneic Fisher rats (weight, 150 g) as free grafts. No immunosuppression was used. At 2 weeks posttransplantation, the recipient rats underwent laparotomy and the grafts were evaluated for viability, growth, enzymatic function, and revascularization. Viable grafts were identified in 27 of 35 renal capsule grafts and 34 of 40 omental grafts. The order of magnitude of fetal growth in the omentum for jejunum was 16 ± 10 versus ileum 23 ± 9 (NS). However, in the renal capsule, ileal growth (15 ± 6) was significantly greater than jejunum (8 ± 5; P < .01). Growth for both jejunal and ileal segments was greater in the omentum (P < .02). The lumen of all omental grafts remained patient; however, 26 of 27 renal grafts had cystic dilatations and areas of obstruction. Microfil casts of the specimens showed vascular connections (neovascularization) between the graft and omentum, a normal serosal vascular pattern, and many submucosal capillary-like vessels. Maltase activity was measured in fetal grafts and compared with control pups bred on the same date as the **donor** animals. The grafts had a higher maltase level 33.4 ± 34.6 μmol/min/g than controls 8.3 ± 2.0 (P < .005). Maltase activity between control jejunum and ileum was similar (7.7 ± 1.5 v 9.0 ± 2.3 [NS]). Fetal jejunal specimens (51.2 ± 41.9) had greater maltase activity than ileum (15.6 ± 6.7; P < .005). Maltase in fetal ileum was similar in omentum and renal capsule; however, jejunal maltase was significantly higher in the renal site (85.0 ± 45.7) versus omentum (25.0 ± 10.0; P < .02). These data indicate that fetal intestinal grafts can be successfully (78% to 86%) implanted in an intraabdominal site in syngeneic recipients. Growth of fetal grafts,

neovascularity, and enzymatic function (jejunum > ileum) were documented in both the renal capsule and omentum; however, bowel morphology and luminal patency was better in the omentum. These observations suggest that free-fetal bowel grafts may have a potential role in bowel **transplantation**.

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ACCESSION NUMBER: 88157898 EMBASE
DOCUMENT NUMBER: 1988157898
TITLE: Bone marrow transplantation in the treatment of severe immunodeficiencies: Possibilities and problems.
AUTHOR: Vossen J.M.
CORPORATE SOURCE: Department of Pediatrics, University Hospital Leiden, Leiden, Netherlands
SOURCE: Immunological Investigations, (1988) 17/2 (135-146). ISSN: 0882-0139 CODEN: IMINEJ
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Infants and children suffering from severe primary immunodeficiencies may be cured by bone marrow **transplantation** from a healthy **donor**. Data obtained in 14 European centers show that about 60% of the patients are surviving disease-free, if they were grafted with bone marrow cells from an HLA-identical related **donor**. Results of **transplantation** of T-cell depleted bone marrow from an HLA-haploidentical related donor were also excellent in infants with severe combined immunodeficiency, with 60% recovery. This therapy is superior to **transplantation** of **fetal tissues** . HLA-haploidentical T-cell depleted marrow **transplantation** for other severe immunodeficiencies was less **successful**. This was mainly due to failure of engraftment, despite intensive conditioning of the recipient, and to infectious complications e.g. by reactivation of latently present viruses.

L33 ANSWER 58 OF 63 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 85219198 EMBASE
DOCUMENT NUMBER: 1985219198
TITLE: Transplantation of organ-cultured fetal pancreas: Experimental studies and potential clinical application in diabetes mellitus.
AUTHOR: Mandel T.E.
CORPORATE SOURCE: Transplantation Unit, Walter and Eliza Hall Institute of Medical Research, Royal Melbourne Hospital, Vic. 3050, Australia
SOURCE: World Journal of Surgery, (1984) 8/2 (158-168). CODEN: WJSUDI
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 009 Surgery
006 Internal Medicine
003 Endocrinology
LANGUAGE: English
AB **Transplantation** of organ-cultured fetal islets of Langerhans may be one way of overcoming the dual difficulties of finding a suitable source of tissue and controlling graft rejection. Experiments in mice have clearly shown that fetal pancreas is an excellent source of islets. Tissue from one **donor** can be used to treat one or more recipients and provides excellent control of drug-induced diabetes, including prevention of diabetic renal microangiopathy. The fetal islets display selective survival in vitro and organ culture can be used to obtain large amounts of tissue for **transplantation**. In addition, growth in 'normoglycemic' media results in functional maturation of the **fetal tissue**. Culture conditions can be modified to eliminate from the putative graft immunogenic 'passenger leukocytes', the cells responsible for initiating graft rejection. **Such** immunogenic cell-depleted grafts can be **transplanted** across histocompatibility barriers without the need for recipient

immunosuppression. Fetal human pancreas shares many properties in common with fetal mouse pancreas. Continuing growth and differentiation occur in vitro and following xenotransplantation into athymic mice. However, fetal human pancreas is frequently damaged by ischemia before it can be used, and also appears to be more susceptible to oxygen toxicity than is fetal mouse pancreas. Nevertheless, when fresh human tissue is available, it may be a suitable source of islets for **transplantation** in type I diabetics.

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ACCESSION NUMBER: 83144014 EMBASE
DOCUMENT NUMBER: 1983144014
TITLE: Growth, differentiation, and viability of fetal rat cortical and spinal cord implants into adult rat spinal cord.
AUTHOR: Patel U.; Bernstein J.J.
CORPORATE SOURCE: VA Med. Cent., Washington, DC 20422, United States
SOURCE: Journal of Neuroscience Research, (1983) 9/3 (303-310).
CODEN: JNREDK
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 001 Anatomy, Anthropology, Embryology and Histology
002 Physiology
021 Developmental Biology and Teratology
008 Neurology and Neurosurgery
LANGUAGE: English
AB **Successful transplantation** of the fetal brain into adult host brain has been accomplished. These studies explore the growth, differentiation, and viability of E11, E12, and E15 rat fetal cortex and fetal spinal cord implantation into the spinal cord of adult rats (**donor** and host, Sprague Dawley). Under deep Chloropent anesthesia, 70 rats had 1-mm cubes of fetal cortex inserted with pressure or by stylus injection subpially between the dorsal horn and dorsal column (left side), or implantation of whole segments of fetal spinal cord. Animals were prepared for light microscopy 14 and 21 days and 1, 2, and 3 months later. Implants by both **fetal tissues** had a 69% survival rate. The younger the fetal implant the higher the **success** of the implant (E11>E15). The diameter of fetal spinal cord implants reached the diameter of control postnatal animals after 30 days. The implants not only increased in mass (up to 7-fold in some cases) but differentiated and matured (apolar, unipolar, bipolar and multipolar) neurons were observed one to three months postimplantation. By 30 days postimplantation, fetal neurons had large, often crenated nuclei, with a large single prominent nucleolus. The most **successful** implants were the young E11 fetal spinal cord into the adult host spinal cord. These implants represent an initial **successful transplantation** of fetal spinal cord into adult spinal cord.

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ACCESSION NUMBER: 82020229 EMBASE
DOCUMENT NUMBER: 1982020229
TITLE: Sex-associated differences in the immune response against fetal major histocompatibility antigens.
AUTHOR: Tartakovsky B.; De Baetselier P.; Feldman M.; Segal S.
CORPORATE SOURCE: Dept. Cell Biol., Weizmann Inst. Sci., Rehovot 76100, Israel
SOURCE: Transplantation, (1981) 32/5 (395-397).
CODEN: TRPLAU
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 026 Immunology, Serology and Transplantation
LANGUAGE: English
AB Alloantibodies against H-2(b) and H-2(k) haplotypes were produced in C57BL/6J and C3H female and male mice in response to **transplantation** of F1 **fetal tissue** (bone) or adult F1 cells (spleen). Testing IgG1 and IgG2 antibodies by means of the fluorescence-activated cell sorter (FACS II), we found no differences between males and females in the isotype content of antisera produced against spleen cells from adult **donors**. In contrast, striking

sex-associated differences were found in the isotypes produced against fetal allografts: females produced much more IgG1 than males, although they produced comparable amounts of IgG2. Hence, it appears that females differ from males in their humoral alloreactivity against major histocompatibility complex (MHC) gene products expressed on fetal cells. **Such** MHC antigens expressed on **fetal tissues** seem to generate different immune signals than the MHC antigens expressed on adult cells. These observations might be of relevance to the biological role played by the IgG1 alloantibodies produced during pregnancy against the MHC alloantigens of the fetus.

L33 ANSWER 61 OF 63 EMBASE
on STN

ACCESSION NUMBER: 80073193 EMBASE
DOCUMENT NUMBER: 1980073193
TITLE: Immunologic problems in islet transplantation.
AUTHOR: Barker C.F.; Naji A.; Silvers W.K.
CORPORATE SOURCE: Harrison Dept. Surg. Res., Sch. Med., Univ. Pennsylvania, Philadelphia, Pa., United States
SOURCE: Diabetes, (1980) 29/SUPPL. 1 (86-92).
CODEN: DIAEAZ
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 003 Endocrinology
006 Internal Medicine
026 Immunology, Serology and Transplantation
009 Surgery
048 Gastroenterology
LANGUAGE: English

AB Rapid rejection of islet allografts is due to both cellular and antibody mechanisms. Isolated islets **transplanted** intraportally across a major histocompatibility complex (MHC) barrier in rats are rejected in 3-5 days. However, with MHC identity, the median survival time can be as long as 30.5 days. In mice isolated islets **transplanted** between H-2-compatible strains survive no more than 1 wk, only a few days more than with an H-2-incompatible cross. In addition, in certain strains of rats and mice, islet isografts from male **donors** are rejected by female recipients. Fetal pancreases **transplanted** beneath the kidney capsule (Lewis to Fisher) are rapidly rejected by 4 days, although longestablished grafts of fetal pancreas are not vulnerable to rejection in contrast to adult islets. Minimizing histoincompatibility has been unsuccessful in overcoming rejection because of the universal vulnerability of **transplanted** islets, and attempts to minimize immunogenicity by use of **fetal tissue** have not prevented rejection; however, culture of **donor** tissue may prove helpful in reducing immunogenicity. **Transplantation** of islet tissue into immunologically privileged sites has not resulted in reliable reversal of diabetes. Immunosuppression by pharmacologic agents **such** as cyclophosphamide, azathioprine, and corticosteroids was of minor effectiveness, but antilymphocytic serum was quite effective in rodents, even on xenografts when the injections were continued. Immunologic tolerance produced at birth by **donor** lymphopoietic cells permits later engraftment of isolated **donor** islets or whole pancreas. However, enhancement by antidonor antibody has not been greatly effective in protecting islets against rejection. The possibility that autoimmunity to islet tissue might interfere with the function of **transplanted** islets was tested in three types of possible autoimmunity: (1) repeated small doses of streptozotocin, (2) encephalomyocarditis virus, and (3) 'BB' rats. In all three cases, **transplanted** islets were effective in reversing experimental diabetes.

L33 ANSWER 62 OF 63 EMBASE
on STN

ACCESSION NUMBER: 80133859 EMBASE
DOCUMENT NUMBER: 1980133859
TITLE: Bone marrow transplantation in Europe.
AUTHOR: Touraine J.L.; Triau R.; Zwaan F.E.
CORPORATE SOURCE: Claude Bernard Univ., Lyon, France
SOURCE: (1979) (I-IX+224p.).
COUNTRY: Netherlands

DOCUMENT TYPE: Book
FILE SEGMENT: 025 Hematology
LANGUAGE: English

AB In this book the papers presented at the second European symposium on bone marrow **transplantation** are reported. Methods for marrow **transplantation** in immunodeficiencies, aplastic anaemias, acute actute leukaemias and osteopetrosis are somewhat different as far as the conditioning regimen, the subsequent treatment and laboratory monitoring are concerned. Most immunobiological aspects (histocompatibility, prevention and treatment of graft versus host disease), isolation measures, and anti infection therapies are described. The overall European experience shows the best results in the severe combined immunodeficiency diseases. In the absence of a compatible **donor**, **fetal tissue transplantation** has resulted in immunological reconstitution of several patients. In aplastic anaemia, marrow **transplantation** has proved **successful** in 36% of the cases and encouraging results have been obtained with antilymphocyte globulin treatment. In acute leukaemia, allogeneic marrow **transplantation** has not yet provided comparable results. Infusion of autologous marrow, possibly treated in vivo, may prove to be an alternative.

L33 ANSWER 63 OF 63 EMBASE
on STN

ACCESSION NUMBER: 78401501 EMBASE
DOCUMENT NUMBER: 1978401501
TITLE: Immunobiology of bone marrow transplantation.
AUTHOR: Dicke K.A.; Lotzova E.; Spitzer G.; McCredie K.B.
CORPORATE SOURCE: Dept. Developm. Therapeut., Univ. Texas Syst. Cancer Cent., MD Anderson Hosp. Tum. Inst., Houston, Tex. 77030, United States
SOURCE: Seminars in Hematology, (1978) 15/3 (263-282).
CODEN: SEHEA3
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 025 Hematology
026 Immunology, Serology and Transplantation
016 Cancer
005 General Pathology and Pathological Anatomy
LANGUAGE: English

AB Bone marrow **transplantation** is a special form of tissue **transplantation** in which four types of graft can be distinguished according to the immunogenetic relation between the host and the **donor**: 1.) autologous bone marrow grafts, 2.) isogeneic **transplantation**, 3.) allogeneic **transplantation**, and 4.) xenogeneic **transplantation**. In aplastic anemia, bone marrow **transplants** from identical twin **donors** are being used and are preferable to **transplants** from allogeneic **donors**; however, the frequency of availability of the identical twin **donor** is low, so that this type of **transplantation** is rare in comparison to the use of allogeneic bone marrow in this disease. The situation is the same for acute leukemia; however, in this disease there has been a renewed interest in the use of autologous bone marrow **transplantation** triggered by new developments in storage and separation techniques of bone marrow cells collected during remission. In the majority of cases of solid tumors, in the absence of tumor invasion of the bone marrow, autologous marrow cells are available. These cells can be collected and stored effectively before the administration of high-dose chemotherapy. The subsequent reinfusion of the thawed bone marrow cells can then be used to prevent prolonged suppression of the hemopoietic system. Serious complications immediately after allogeneic bone marrow **transplantation** are related to the acute GVH reaction. Methods to mitigate and prevent GVH reactions fall into two major categories: selection of the donor on the basis of histocompatibility testing and described: in this context only the most effective and commonly used methods will be mentioned. They are (1) **donor** selection, (2) treatment of the recipient by weekly intravenous administration of methotrexate, (3) elimination of lymphocytes from the bone marrow cell suspension before **transplantation**, (4) bacteriologic decontamination of the recipient, and (5) the use of fetal liver as a source for HSC. The acute GVH problem has been substantially

diminished by the development of a cell fractionation technique (discontinuous albumin gradient centrifugation). This technique, takes advantage of differences in cellular density between stem cells and lymphocytes. In the patient population with leukemia treated with fractionated marrow, lifespan was still short owing to complications other than GVH. The patients in this group consisted of endstage patients with severely compromised immunologic and hematologic functions making them extremely prone to bacterial and viral infections both before and during the immediate posttransplantation period. According to the bone marrow registry, 69 SCID patients have been grafted with hemopoietic cells. **Transplantation** of marrow from HLA genetically identical **donors** provided the highest 6-mo survival rate (63%). Six-month survival rates for patients who received **fetal tissue transplants** (43%) or marrow from mixed leukocyte culture (MLC)-negative **donors** (38%) were significantly higher than for patients treated with marrow from MLC-positive **donors** (5%). The **transplantation** results in aplastic anemia are promising using bone marrow from MDC-identical siblings. In one series long-term survival is reported in 38% of the patients. Similar results are reported by other groups in the bone marrow **transplantation** registry. In solid tumors in man **such** as lymphoma and ovarian cancer the hemopoietic toxicity of high-dose chemotherapy had been significantly reduced by bone marrow **transplantation**. The extreme favorable results in terms of tumor cell control, absence of serious infections, and long-term tumor control without chemotherapy support the use of autologous bone marrow **transplantation** as a supportive measure to prevent lethal hemopoietic toxicity. (Newman - Bridgeport, Conn.)

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(FILE 'HOME' ENTERED AT 15:34:54 ON 20 JUL 2004)

FILE 'MEDLINE' ENTERED AT 15:35:04 ON 20 JUL 2004

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L1          6659 S FETAL TISSUE
L2        146532 S IN UTERO OR DONOR
L3         59250 S PERCUTAN?
L4             2 S L1 (S) L2 (S) 3
L5             0 S L1 (S) L2 (S) L3
L6            60 S L1 (S) L2
L7         23472 S INCISION
L8             0 S L1 (S) L2  (S) L7
L9        354581 S TRANSPLANT?
L10           14 S L1 (S) L2  (S) L9
L11      1197155 S SUCTION OR VACUUM OR SUC?
L12            1 S L1 (S) L2  (S) L9 (S) L11
L13      1406689 S SUCTION OR VACUUM OR SUC? OR REMOV?
L14            1 S L1 (S) L2  (S) L9 (S) L13
L15       247721 S ?CUTAN?
L16            0 S L1 (S) L2  (S) L9 (S) L15
L17            0 S L1 (L) L2  (L) L9 (L) L15
L18           21 S L1 (L) L2  (L) L9 (L) L13
L19           64 S L1 (L) L15
L20           64 S L1 (L) L15 (L) L19
L21           13 S L1 (L) L15 (L) L19 (L) L13
L22        59250 S PERCUTAN?
L23            0 S L1 (S) L22
L24            2 S L1 (L) L22
L25           79 S L2 (S) L22
L26       215420 S FETAL
L27            8 S L2 (S) L22 (S) L26
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FILE 'BIOSIS, EMBASE, CAPLUS, PCTFULL, USPATFULL, SCISEARCH, MEDLINE, CONFSCI' ENTERED AT 15:57:23 ON 20 JUL 2004

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L28           80 S L14
L29           69 DUP REM L28 (11 DUPLICATES REMOVED)
L30            5 S L16
L31            3 S L5
L32           74 S L12
L33           63 DUP REM L32 (11 DUPLICATES REMOVED)
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=> logoff hold
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   206.91     235.21

 SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 16:10:36 ON 20 JUL 2004
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